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Hodnocení finanční situace společnosti Baidu

Evaluation of Financial Situation of Baidu Company

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1. Introduction
2. Characterization of the Financial Analysis Methodology
3. Profile of the Baidu Company
4. Evaluation of Financial Situation of the Company
5. Conclusion

Bibliography
List of Abbreviations
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List of Annexes
Annexes

References:

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The declaration

"Herewith I declare that I elaborate the entire thesis, including all annexes, independently."

Ostrava dated 9.5. 2016

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Contents

1 Introduction

Financial analysis (also called financial analysis), which refers to profitability, solvency, liquidity, stability, history and the prospects for growth, trade comparison and other financial indicators and methods, analysis of enterprise, project or investment. It is performed by professionals who prepare reports using ratios that make use of information taken from financial statements and other reports. Financial analysis of the ultimate goal is to provide financial statement users to make relevant decisions. General purpose of financial analysis can be summarized as: to evaluate the past performance, measure current financial situation, to predict the future trend of development.

The objective of the thesis is to assess the financial performance of Baidu Company, based on data from 2009 to 2013. The financial performance will be evaluated by methods of financial analysis, such as common-size analysis, financial ratio analysis, and DuPont analysis, so that we can measure how Baidu Company's current financial situation is, and get some results to manage its future development.

This thesis consists five parts, Chapter 1 and 5 are introduction and conclusion. The three main parts are Chapter 2, 3 and 4. Second Chapter is about financial analysis methodology that will be used in the thesis when the company will be analyzed. In this part, we focus on two methods, common-size analysis and financial ratio analysis. Third Chapter describes the profile of Baidu Company. In this part we can know some basic information about Baidu Company such as history, products or technology information. Baidu Company is the biggest internet company in China. Also, "Baidu", is the leading Chinese language search engine. China provides the search engine's main website; more than 80% is provided by "Baidu". Forth Chapter is the most important chapter. In this part the important financial ratios will be calculated. These ratios allow us to compare date over time, so we can identify some trends of some unusual development. Based on the results presented in Chapter 4, main conclusions and recommendations will be presented.

2 Description of the Financial Analysis Methodology

This chapter will introduce financial analysis methodology, included financial statement, common-size analysis, financial ratio, and DuPont analysis.

2.1 Financial statement

Financial statement includes balance sheet, income statement, and cash flow statement.

2.1.1 Balance sheet

Balance sheet said enterprise in a certain date (usually in the form of various accounting final) financial situation (the condition of assets and liabilities and owner's equity), the main use the balance principle of accounting, accounting balance sheet will accord with the accounting principles of assets and liabilities shareholders' equity transaction subjects are divided into two blocks, assets and liabilities and shareholders' equity in a journal transfer ledger trial after adjustment and so on accounting procedures, based on the static enterprise situation of a specific date, condensed into a report.

The basic structure of the balance sheet, see table 2.1, generally by the various assets change order one by one, the left column in the table, all reflect the unit property and materials, the creditor's rights and rights. All of the liabilities and owner's equity is one by one on the right of the table. Liabilities generally listed in the top right respectively reflect various projects of long-term and short-term liabilities, owner's equity column in the lower right, reflect the owners of capital and surplus. The amount of left sides is equal to the right sides.

Table 2.1 General structure of balance sheet

Balance sheet	
Assets	**Liabilities and owner's equity**
Cash	**Liabilities**
Accounts receivable	Short-term debt
…	Accounts payable
	Owner's equity
	Retained earning
Total	Total

Source: Own calculation.

The balance sheet reflects enterprise at a specific date. Because of it reflects a certain point, therefore; also call it as static statements. Balance sheet mainly provides information about the enterprise financial situation. Through the balance sheet, we can provide a certain date the total amount and structure of assets, shows that the enterprise own or control of resources and its distribution. Also, it can provide a certain date total debt and its structure, shows that the enterprise in the future need to pay off the debts with how many assets, or services and pay off time.

There are three formulas to reflect the enterprise's financial structure.

$$\text{Net assets ratio} = \frac{\text{Total shareholders' equity}}{\text{Total assets}} \tag{2.1}$$

The index is mainly used to reflect the enterprise's financial strength and debt security. The height of the net assets ratio is proportional to the enterprise financial strength. But if the rate is too high, the financial structure will be unreasonable.

$$\text{The net value of fixed assets rate} = \frac{\text{Net value of fixed assets}}{\text{Original value of fixed assets}} \tag{2.2}$$

This indicator reflects the degree of old and new enterprise fixed assets and production capacity, the index for industrial production capacity evaluation is great significance.

$$\text{The capitlization rate} = \frac{\text{long - term liabilities}}{\text{long - term liabilities} + \text{shareholders' equity}} \tag{2.3}$$

This index is mainly used to reflect the enterprise need to pay and long-term interest-bearing debt accounted for the proportion of the long-term operating funds, therefore the index is unfavorable and exorbitant, should be generally below 20%.

2.1.2 Income statement

The income statement is a report reflects a certain accounting period, (such as monthly, quarterly, semi-annual, or annual), production and operation results of accounting statements. The operating results of an enterprise during a certain accounting can show the profit, may also show the loss, therefore, the income statement is also called the income statement. It fully shows the various revenue of the enterprise at a specific period, all the fees, costs or expenses, and enterprises to achieve profits or losses.

$$\text{Profit} = \text{Income} - \text{Cost} \tag{2.4}$$

Its specific content depends on the incomes, expenses, profit accounting elements and its content, such as the income statement items are revenues, expenses and profits element content concrete embodiment. From the reflection of capital movement of enterprise management point of view, it is a kind of reflect the dynamic performance of the enterprise operating funds statements, mainly to provide information about the enterprise operating results, belongs to the dynamic accounting statements.

Through the income statement, can reflect the revenue of the enterprise a certain accounting during a period, expenses cost can reflect a certain accounting during a period, besides, the results can reflect the enterprise production and operation activities.

2.1.3 Cash flow statement

The cash flow statement is a reaction to a certain period enterprise operating activities, investing activities and financing activities affects its cash and cash equivalents of the financial statements. The report shows the Balance Sheet and Income Statement how cash and cash equivalent, and according to the company's operating, investing and financing Angle. As an analytical tool, the cash flow statement is to determine the main function of company short-term survival ability, especially the ability to pay the bill. The cash flow statement reflects a company in a certain period of cash inflows and cash outflows dynamic status reports.

Through the cash flow statement, can be summarized to reflect operating activities, investing activities and financing activities on corporate cash flow, the influence of the evaluation of enterprise's profit, financial status and financial management, than the traditional income statement provides a better basis.

The cash flow statement is for providing evidence of the company management if it is healthy. If a company business activities generated cash flow cannot pay dividends and keep the equity of production capacity, so it have to loan way to meet these needs, then it gives a warning, the company in the long run can't keep spending under normal circumstances. The cash flow statement by showing the shortage of the management of cash flow and had to borrow to pay not permanent support dividend level, so as to reveal the development of the company's internal problems.

2.2 Common-size analysis[1]

Common-size analysis is an analysis method for the different companies which with different size to compare their financial statements, or for one company to compare financial statement during different time periods. It reaches the comparison by measuring the part of the company's overall operation of financial business. By doing so, common size analysis reduces the percentage of the original data, allowing easier to compare companies and across time. This method of analysis can be performed in the income statement and balance sheet, but it is only as accurate use of the number of accounting practice.

Common-size analysis can be divided into vertical analysis and horizontal common-size analysis for financial statements. The vertical analysis is a project as the base values and all other accounts of the financial statements to compare the value of this foundation. The horizontal common-size analysis is a methodology which can show changes in the amounts of homologous financial statement items over a period of time.

2.2.1 Vertical common-size analysis

Vertical common-size analysis is a method which is very useful in financial statements; it expresses each financial item on a statement of a base figure. To use the vertical common-size analysis, the total of assets and the total of liabilities and stockholders' equity are generally used as base figures. And when we use a vertical analysis to the income statement, in generally the sales figure used as the base and other parts of income statement, such as cost of sales, gross profit, and so on, the all are in percentage. Among these all, we can see how a company’s credits on debt financing has changed over time by focusing on liabilities as a percentage of assets. Besides, by using vertical common-size analysis a business can fast identify strengths, weakness and trends.

[1] The method is mentioned by Stephen A. Ross, Randolph W. Westerfied, Bradford D. Jordan from 《Corporate financial》

2.2.2 Horizontal common-size analysis

Horizontal common-size analysis can show changes in the amounts of homologous financial statement items over a period of time, which is a very useful financial statement analysis skill. And we can use it for evaluating the trend situations. Also, it can be used to do some analyze about company's financial situation and profitability.

2.3 Financial ratio analysis

Financial ratio is a relationship which determined form a firm's financial information and used for comparison purposes. Usually we can use the financial ratio analysis to avoid some problems involved in comparing companies of different size, to calculate and compare financial ratios. Moreover, we analyze many standard ratios to try to evaluate the overall financial condition of a company or other organization. There are four main types of financial ratios can be used to analyze company's situation.

2.3.1 Liquidity ratios[2]

Liquidity ratios are a group of figures or ratios which can measure a company whether is able to pay off its short-term debt obligations. Liquidity means an ability of assets transfer to cash in a short time. It is by measuring the liquid assets of a company to against its short-term liabilities. In generally, there are a number of different liquidity ratios, which each measure slightly different types of assets when calculating the ratio. More conservative measures will exclude assets that need to be converted into cash. We can be provided a way of a company if is able to generate cash to meet when it's immediate needs by liquidity ratios.

There are three fundamental liquidity ratios that can provide insight into short-term

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[2] Berman, Karen, and Joe Knight, with John Case. "Liquidity ratios: Can we pay our bills?" In Financial Intelligence: A Manager's Guide to Knowing What the Numbers Really Mean. Boston, MA: Harvard Business School Press, 2005. Also available separately.

liquidity: current, quick, and cash ratios. These work as follows:

Current ratio

Current ratio is one of the best known and most widely used ratio, and it is widely discussed in the financial world, also, easy to understand. However, it can be misleading because the chances of a company ever needing to liquidate all its assets to meet liabilities are very slim indeed. It is often more useful to consider a company as a going concern, in which case need to understand the time it takes to convert assets into cash, as well as the current ratio.

The current ratios can be defined as:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} \tag{2.5}$$

This expression means that the higher current ratio, the high level of liquidity of assets; the lower current ratio, the lower of liquidity of assets. It is because current assets and liabilities are, in generally, transfers to cash over the following 12 months; the current ratio is a method of short-term liquidity.

Quick ratio

The quick ratio, as known as acid-test ratio, is a very common way to measures a company's ability to use its cash or quick assets to pay off its current liabilities in a short period. Quick assets include those current assets that presumably can be quickly converted to cash at close to their book values. To further evaluate liquidity, the quick ratio is calculated just like the current ratio:

$$\text{Quick ratio} = \frac{\text{Cash} + \text{Short - term investment} + \text{Receivables}}{\text{Total current liabilities}} \tag{2.6}$$

Generally speaking, the quick ratio should be 1:1 or higher; however this varies widely by industry. In general, the higher is the ratio, the greater is the company's liquidity. It means the better able to meet current obligations using liquid assets.

Cash ratio

The cash ratio is most commonly used as a method of company's liquidity. It refers to a ratio of a company's total cash and cash equivalents to its current liabilities. The cash ratio is generally a more conservative look at a company's ability to cover its liabilities than many other liquidity ratios. A very short-term creditor might be in it.

$$\text{Cash ratio} = \frac{\text{Cash}}{\text{Current liabilities}} \tag{2.7}$$

It is the ratio of cash to current liabilities refers to the enterprise, reflects the enterprise's immediate cash ability. Here in cash, is refers to the cash and cash equivalents. This ratio can show enterprise's ability to repay debts immediately.

2.3.2 Activity ratios

An activity ratio is one of several financial analysis ratios that measures how quickly a company can convert certain of its assets into cash, or revenue. The activity ratio, as well as other accounting ratio, for the basic analysis to determine a company's relative strength compared with its rivals. Information used to calculate the activity than was found on a company's balance sheet or income statement. There usually have three types of activity ratios, the asset turnover ratio, the inventory turnover ratio and the receivable turnover ratio.

Total assets turnover

Asset turnover ratio[3] is a financial ratio, in general, we can use it to measure the efficiency of a company's use of its assets in generating sales revenue or sales income to the company.

$$\text{Assets turnover ratio} = \frac{\text{Total revenue}}{\text{Average total assets}} \tag{2.8}$$

The fixed assets turnover

The fixed assets turnover ratio can make sense for every fixed asset has how many sales and can be defined as:.

$$\text{Fixed assets turnover ratio} = \frac{\text{Sales}}{\text{Net fixed assets}} \tag{2.9}$$

The inventory turnover ratio

Generally speaking, the Inventory turnover is a measure of the number of times inventory is sold or used in a time period such as a year. The formal calculation is the cost of goods sold during the year divided into the average investment in the company's inventory.

$$\text{Inventory turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average inventory}} \tag{2.10}$$

or

$$= \frac{\text{Cost of material - Change in inventories(of } \frac{1}{2} \text{ and } \frac{1}{1} \text{ goods)}}{\text{Inventories}} \tag{2.11}$$

[3] Bodie, Zane; Alex Kane and Alan J. Marcus (2004). *Essentials of Investment*s, 5. ed.

This ratio should be compared against industry averages. A low turnover implies poor sales and, therefore, excess inventory. A high ratio implies either strong sales or ineffective buying. High inventory levels are unhealthy because they represent an investment with a rate of return of zero. It also opens the company up to trouble should prices begin to fall.

The receivables turnover ratio

The receivables turnover ratio is a financial ratio which can quantify a firm's effectiveness in extending credit as well as collecting debts. Also, we can use receivables turnover ratio to measure how fast a company can sell their products, so that we can have a clearly view. The receivables turnover ratio is defined in the same way as inventory turnover ratio.

$$\text{Receivables turnover ratio} = \frac{\text{Sales}}{\text{Accounts receivable}} \tag{2.12}$$

However, some companies' will only show sales, just because it can affect the ratio depending on the size of cash sale. If receivables account of the company can recover in time, the company's capital efficiency can be greatly improved.

Day's sales in receivables

Loosely speaking, the day's sales in receivables ratio makes more sense if transfer it to every day, so the day's sale in receivables is:

$$\text{Day's sales in receivables} = \frac{365\ \text{days}}{\text{Receivables turnover}} \tag{2.13}$$

The days' sales in accounts receivable ratio, also known as the number of days of receivables, it refers to the average number of days when it takes to collect an account receivable. Since the days' sales in accounts receivable is an average, it should be careful.

Payables turnover

Generally speaking, payables present a company's financing sources in operating

activities. And when payables turnover is going up it means the company need more time to pay back its payment. So payables turnover presents the company's ability to repay its debts.

$$\text{Payables turnover} = \frac{\text{Sales}}{\text{Average accounts payables}} \tag{2.14}$$

Working capital turnover

Working capital equals to current assets minus current liabilities. It can be used to measure how efficiently the company uses its working capital to make some revenues.

$$\text{Working captial turnover} = \frac{\text{Sales}}{\text{Average working captial}} \tag{2.15}$$

2.3.3 Solvency analysis

In generally, we use the long-term solvency ratio to analyze that a company's level of financial risk. It is intended to address the company's long-run ability to meet its obligations, or more generally, its financial leverage. There are three commonly used measures and some variations.

Total debt ratio

Debt Ratio is a financial ratio that indicates the percentage of a company's assets that are provided via debt. It is the ratio of total debt (the sum of current liabilities and long-term liabilities) and total assets (the sum of current assets, fixed assets, and other assets such as 'goodwill).

The total debt ratio takes into account all debt of all maturities to all creditors and it is defined as:

$$\text{Total debt ratio} = \frac{\text{Total debts}}{\text{Total assets}}. \tag{2.16}$$

Long-term debt ratio

The long-term debt ratio is a measure of how much debt a company carries compared with the value of its assets or its equity. If a company with a high long-term debt ratio, it means more at risk in the event of a business downturn.

$$\text{Long - term debt ratio} = \frac{\text{Long - term debt}}{\text{Long - term debt} + \text{Total equity}} \tag{2.17}$$

The long-term debt ratio mentioned s an insight into whether the company is likely to be able to meet its obligations as a whole, and how much competition the creditor will have if the company is struggling to repay debts.

Debt-equity ratio

It is a measure of a company's financial leverage calculated by dividing its total liabilities by stockholders' equity. It can indicate the proportion of equity and debt the company is using to finance its assets.

$$\text{Debt - equity ratio} = \frac{\text{Total debt}}{\text{Total equity}} \tag{2.18}$$

If a company is with a high debt-equity ratio, in generally, it means that the company has been aggressive in financing its growth with debt.

Cash coverage ratio

The cash coverage ratio is a measure of a company's ability to meet its financial obligations. Usually the higher is the coverage ratio; the better is the ability of the enterprise to fulfill its obligations to its lenders. The trend of coverage ratios over time is also studied by analysts and investors to ascertain the change in a company's financial position.

$$\text{Cash coverage ratio} = \frac{\text{EBIT} + \text{Depreciation}}{\text{Interest}} \tag{2.19}$$

2.3.4 Profitability ratios

The profitability ratios is a usual of financial metrics that are used to assess a business's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time. There are three measures which is probably the best known and most widely used of all financial ratios.

Profit margin

Profit margin is an indicator of a company's pricing strategies and how well it controls costs. The profit margin is mostly used for internal comparison. And this ratio can tell us about how much profit we can get in each sales.

$$\text{Profit margin} = \frac{\text{Net income}}{\text{Sales}} \tag{2.20}$$

Return on assets

Return on assets (ROA), also known as return on assets, it is used to measure how much per unit of assets to create index of net profit. It's a measure of profit per dollar of assets.

$$\text{Return on assets} = \frac{\text{Net income}}{\text{Total assets}} \tag{2.21}$$

Return on assets is the most widely used measure of bank profitability index, the index is higher, shows that the enterprise the better utilization of assets, the enterprise in increasing income and save money using achieved good effect. If the ratio is lower, it means the company's assets using the worse results.

Return on equity

The return on equity (ROE), as known as shareholder´s returns, is a measure of how the stockholders fared during the year. And it is measured relative to Return On investment of shareholders' Equity index, reflecting the company net profit ability caused by net asset value

and can be defined as:

$$\text{Return on equity} = \frac{\text{Net income}}{\text{Total equity}}. \tag{2.22}$$

However, ROE, the analysis of the different industries should pay attention to the role of the individual rate. For example, marginal profit margins are usually very low industry such as retailing, leverage ratio were also only. Stores, however, can have a very high turnover; asset turnover becomes the important index analysis of this kind of industry.

2.4 DuPont analysis

DuPont analysis the relationship between the uses of several major financial ratios to synthetically analyze the financial position of the enterprise, this analysis method is first used by the United States. DuPont has two different methods, one is the DuPont analysis, and the other is the analysis of gradual changes.

DuPont analysis method is used to evaluate the company profitability and shareholders' equity returns level, from a financial perspective enterprise performance evaluation of a classical method. Its basic idea is the enterprise net assets yield level decomposition to the product of a number of financial ratios, such conducing to in-depth analysis enterprise business performance.

DuPont analysis shows that ROE is influenced by three factors[4]:

1. Profit margins, as measured by the return on sales shows that the enterprise's profit ability;

2. Total assets turnover, as measured by the asset turnover ratio shows that the

[4] http://wiki.mbalib.com/wiki/%E6%9D%9C%E9%82%A6%E5%88%86%E6%9E%90%E6%B3%95#_ref-.E8.A2.81.E9.9B.81.E9.B8.A3_0

enterprise's operating ability;

3. Financial leverage, as measured by the rights and interests multiplier shows that the enterprise's solvency.

$$\mathrm{ROA} = \frac{\text{Net income}}{\text{Total assets}} = \frac{\text{Net income}}{\text{Sales}} \cdot \frac{\text{Sales}}{\text{Total assets}} \tag{2.23}$$

$$\mathrm{ROE} = \frac{\text{Net income}}{\text{Sales}} * \frac{\text{Sales}}{\text{Total assets}} * \frac{\text{Total assets}}{\text{Equity}} \tag{2.24}$$

DuPont analysis can help enterprise management more clearly see the determinants of return on equity capital, and the sales net profit margin and total asset turnover, the correlation relationship between the debt ratio, provides a clear overview to management whether the company assets management efficiency and maximize shareholder´s returns roadmap.

2.4.1 Analysis of gradual changes

It enables to quantify the change in the basic ratio which is caused by change in the component ratio. And it should be decomposed into three component ratios.

The formula can be written as:

$$\Delta X_{a1} = \Delta a_1 \cdot a_{2,0} \cdot a_{3,0} \cdot \frac{\Delta y_x}{\Delta x},$$

$$\Delta X_{a2} = a_{1,1} \cdot \Delta a_2 \cdot a_{3,0} \cdot \frac{\Delta y_x}{\Delta x},$$

$$\Delta X_{a3} = a_{1,1} \cdot a_{2,1} \cdot \Delta a_3 \cdot \frac{\Delta y_x}{\Delta x} \tag{2.25}$$

In this formula, we need to know that *x* means the basic ratio, *x* is the absolute change in the basic ratio, ―a‖ is component ratio and ―a‖ is the absolute change in the component ratio.

3 Profile of Baidu Company

This chapter will mainly introduce some basic information about Baidu Company, such as its history, profiles, products, technology, management, and strategies.

3.1 History

Its name “Baidu” is form a poem which is written more than 800 years ago around Song Dynasty. The poem compares the search for a delicate beauty amid disordered charming with the search for one's dream while confronted by life's many barriers. "…hundreds and thousands of times, for her I searched in chaos, suddenly, I turned by chance, to where the lights were waning, and there she stood." “Baidu” its literal meaning is for hundreds of times, it means persistent search.

“Baidu” was set up at 2000, and it was found by Robin Li who is the founder of forward-looking search technology Hyperlinks Analysis, a very talent person which created a whole new world in Chinese Internet, and provided the best way for people to search things what they want to find online, is the world's largest Chinese search engine. And then August 5, 2005, “Baidu” in the United States issued on NASDAQ, becoming in 2005 the global capital market on the most conspicuous of the listed company, “Baidu” entering into a new stage of development.

3.2 About “Baidu”

“Baidu”, is the leading Chinese language search engine. Over every minute, “Baidu” billions of Chinese web page, global unique "hyperlink analysis technology, the second level of fast speed, large server group, accept Chinese search requests from various countries around the world. Every year, billions of searches through the response of tens of millions of Internet users share to the most pure search experience from “BAIDU”, walking on the sea of information. “Baidu” Company is a leading Chinese Internet software technology provider and platform operators. China provides the search engine's main website; more than 80% is

provided by “Baidu”.

Since the “Baidu” Company entering the China’s Internet and software market, it has been to truly develop to conforms to the Chinese habits of core technology of the Internet as their mission, and relying on its own strength constantly developed with independent intellectual property rights of scalable web applications.

3.3 Products

Baidu’s products and services for various enterprises and institutions designed for the network’s basic demand. The main products lines are, first one is Based on the Chinese web page retrieval of global Internet, The product line is mainly in the service of web portal, including Sina, Sohu, Tom.com, 263 online, 21 cn, Shanghai hotline, guangzhou Windows, etc; second is enterprise information retrieval solutions, including via net matter series software and baidu enterprise competitive intelligence system, Among them, the net matter series software includes web station retrieval system, industry vertical retrieval system, news monitoring and control system, enterprise vertical retrieval system, real-time information system and information acquisition system.

At present, the enterprise solution of information retrieval is to serve the different areas, including telecom companies, such as Guangdong telecom, Hebei telecommunications; financial firms, such as the people's bank of China, bank of China. The field of media, such as CCTV, Hong Kong TVB, Guangming daily net. The field of education, such as Tsinghua University, and so on. In addition, Baidu also used in the national large CDN network information transmission technology, acceleration and web caching technology (web site), the user include Shenzhen commercial daily, Sichuan news net, China's basic education network, and so on.

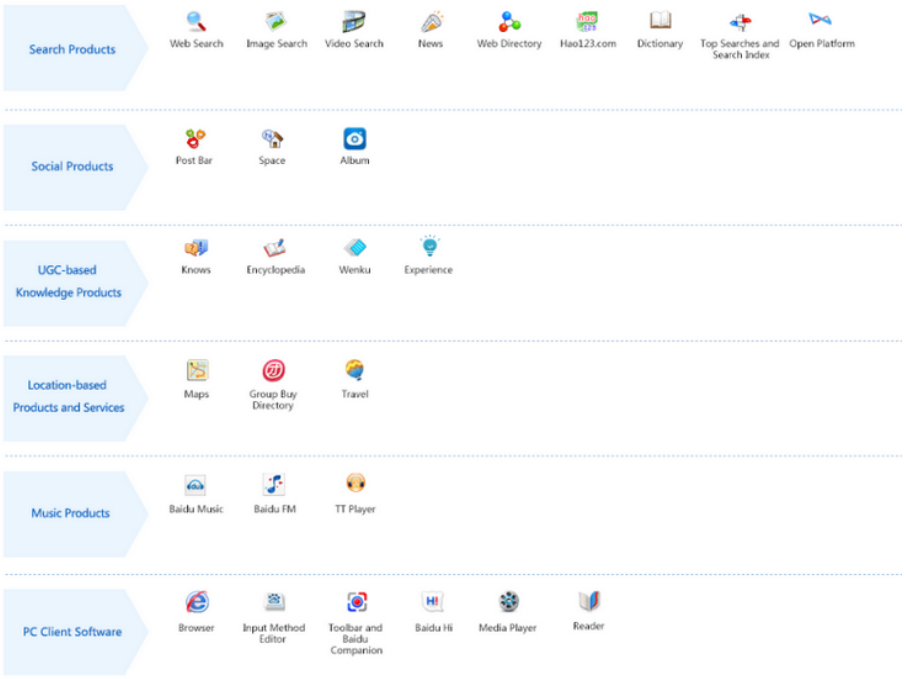
It is Baidu successful key that it’s deeply understand Chinese language and culture, so that it can tailor its search technology by use this kind of knowledge for the users’ needs. And Baidu provide so many ways to search and share information to the users. Besides, the main

core search products, it also focuses on many community-based products, for example, the largest and world's first Chinese language query-based search online community platform Baidu PostBar; Baidu Knows, which is also the world's first and largest Chinese information sharing place; and the largest Chinese language encyclopedia which is made by the users in the world, Baidu Encyclopedia, and so on.

In addition to these main products, Baidu also have some helpful vertical search-based products, for instance Image Search, News Search, Maps, Video Search, and the other else. It continually improves and develops its products and services through its stronger and sophisticated technology. And its new Box Computing Platform can make users deeply and linked content and also applications, so that they can use more convenient and directly by using the Search Box. The Box Computing could attractively improve users' search experience and it became more and more general across the whole Internet devices including mobile and computers platforms.

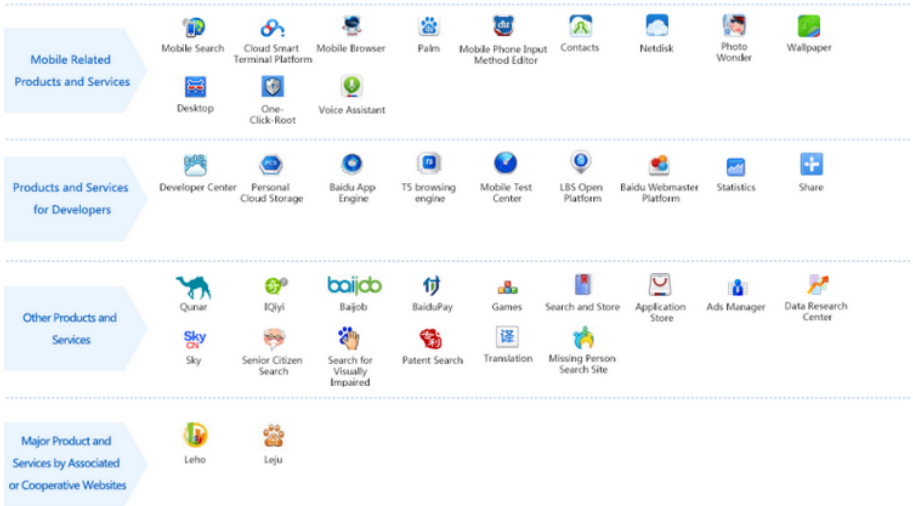
Baidu Company offers performance-based a media platform for online marketing customers and through the Baidu organic websites and its affiliated websites, it can display advertisements.

Figure 3.1.Baidu's main products



Source: http://ir.baidu.com/phoenix.zhtml?c=188488&p=irol-products.

Figure 3.2: Baidu's main products2



Source: http://ir.baidu.com/phoenix.zhtml?c=188488&p=irol-products.

3.4 Technology

About Baidu search engine, Baidu search engine using the high performance network "spider" program automatically search information in the Internet, can be customized, highly scalable scheduling algorithm makes the searcher can in a very short period of time the largest number of Internet information collection. Throughout China and the United States are equipped with server, Baidu search scope covers mainland China, Hong Kong, Taiwan, Macau, Singapore and other Chinese regions, and North America, Europe, part of the site. Baidu search engine has the world's largest Chinese databases, totaled more than 60 million pages, and also in rapid growth at the rate of hundreds of thousands of pages every day. Baidu has been to develop the most conforms to the Chinese use habits of the search engine as own duty, after three years effort, Baidu search engine has become the world's most powerful Chinese search engine.

And about the core technology: Hyperlink Analysis. Hyperlink analysis technology, is the key technology of a new generation of search engine, has for the world each big search engine generally used, Baidu CEO Robin Li is hyperlinked analysis to the patent holder only. In academia, a paper cited means that the more the better, the higher academic value. Hyperlink analysis is based on the analysis of link to the website of how to evaluate the quality of linked sites, this ensures that users in the Baidu search, the more the content of the popular with the users to the top.

3.5 Management

Robin Li, Baidu President Network technology co., LTD. The information management specialty of the graduated from Beijing university in 1991, went to the United States after the state university of New York at buffalo to complete a master's degree in computer science. Eight years in the United States, Mr. Li has successively served as the Dow Jones company senior consultant, the Wall Street journal online real-time financial information system designers, as well as in international well-known Internet companies - worked, senior

engineer, is a new generation of authoritative experts in the field of Internet technology. He first created ESP technology, and will it successfully used in the INFOSEEK/GO.COM search engine. GO.COM image search engine is his another extremely has the application value of technological innovation. In 1996, he first solved how to sorting based on web quality and based on the correlation of perfect combination of sorting problem, and thus obtained the patent.

At the end of 1999, plans to return home with friends the risk investment and xu co-founded baidu network technology co., LTD. Under his lead, baidu has relied on its own strength for the majority of Internet users to provide good search engine, launched a new business model - search engine rankings, new era for many enterprises to provide the most advanced network marketing tool, and with independent intellectual property rights of enterprise application software, at the same time as the main Chinese portal to provide the most advanced search engine technology services. Baidu keep leading technology advantage in technology. Series of mp3 search, image search, personalized services such as news search. In June 2003, according to the statistics institutions of the third party authority alexa statistics, in the most popular Chinese website baidu has placed fourth, shows that baidu has killed into four domestic website, become the world's most powerful search engine in Chinese and Chinese Internet users preferred the search engine. The emergence of baidu, for China's Internet set up a flag of national technology.

3.6 Strategies

At the beginning of the foundation, Baidu made "to make people more convenient access to information, find desires" as its mission, and constant and unremitting efforts to struggle. Past few years, Baidu has been tireless pursuit of technological innovation, relying on the brougham great and profound Chinese wisdom, dedicated to provide users with the highest network technology services, to create China's Internet enterprise business miracle, Baidu in brand, customer satisfaction and business performance has become the leader of the industry, and improve China's Internet technology components, to help more Internet

company profits. Baidu stick to the goal is to improve China's Internet technology components, to help China's Internet development more quickly. Baidu's vision is to become the best Chinese Internet information retrieval and transmission technology provider, become China's network technology companies in the outstanding representatives of the industry in the world.

Baidu's long-term strategic goal is: Baidu Company is committed to user needs as the basis, to provide diversified products and services to expand domestic search engine market share, expanding the Internet comprehensive service sector development, continue to speed up the pace of internationalization.

Baidu Company, in the future for the company's business development strategy mainly has four aspects:

1. The wireless Internet domain;

2. Community services;

3. Shop area in the morning;

4. The area around the world.

Baidu Company's competitive strategy is differentiation strategy and centralization strategy slightly to give priority to, with a low cost strategy is complementary combination of competitive strategy.

4 Evaluation of Financial Situation of Company

In this Chapter, we will use common-size analysis, financial ratio analysis and DuPont analysis to analyze financial situation of Baidu Company. From the Baidu Company's data basis on 2009 to 2013, we will get some finally results. We can have a clearly look about Baidu Company's financial position.

4.1 Common-size analysis

In this part, we will use the method of common-size analysis which we talked about before in chapter 2 to analyze the Baidu Company's financial statement. Common-size analysis is a very useful analysis method for the different companies which with different size to compare their financial statements, or the company compares to themselves during different periods. It will be divided into two parts, one is vertical common-size analysis, and other one is horizontal common-size analysis.

4.1.1 Vertical common-size analysis

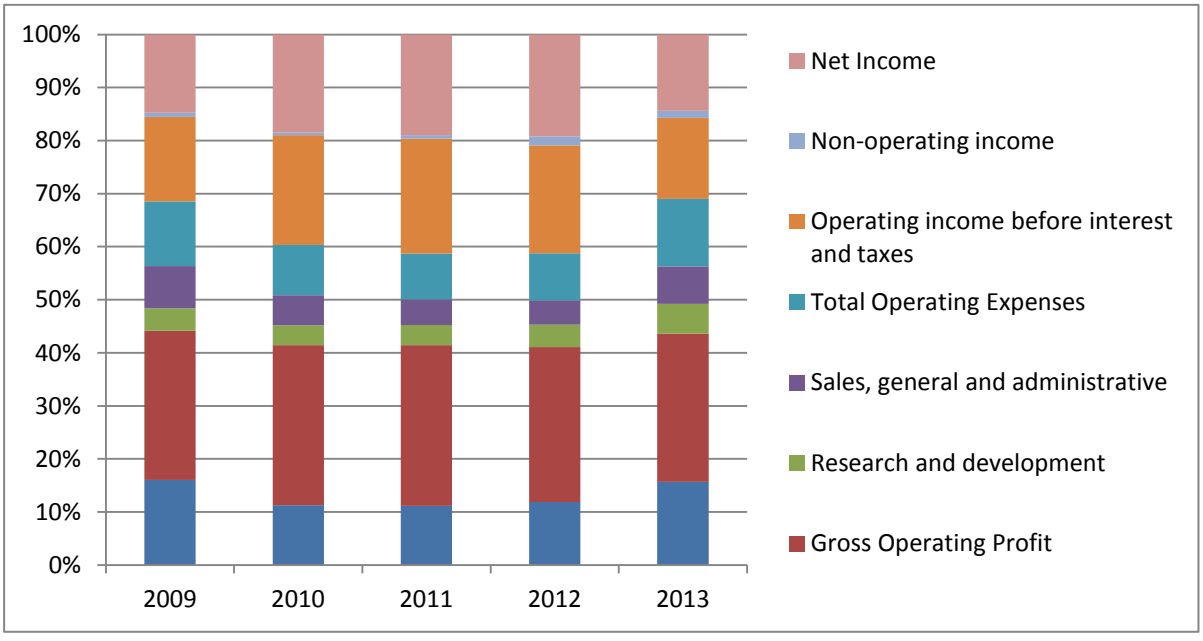
In vertical common-size analysis, we will compare all the five years to analysis what changes happen in the company.

Table 4.1 Vertical common-size analysis of income statement

	2009	2010	2011	2012	2013
Cost of revenue	36%	27%	27%	29%	36%
Gross operating profit	64%	73%	73%	71%	64%
Research and development	10%	9%	9%	10%	13%
Sales, general and administrative	18%	14%	12%	11%	16%
Total operating expenses	28%	23%	21%	22%	29%
Operating income before interest and taxes	36%	50%	52%	50%	35%
Non-operating income	2%	1%	2%	4%	3%
Net income	33%	45%	46%	47%	33%
Revenue	100%	100%	100%	100%	100%

Source: Own calculation.

Figure 4.1: Vertical common-size analysis of income statement



Source: Own calculation.

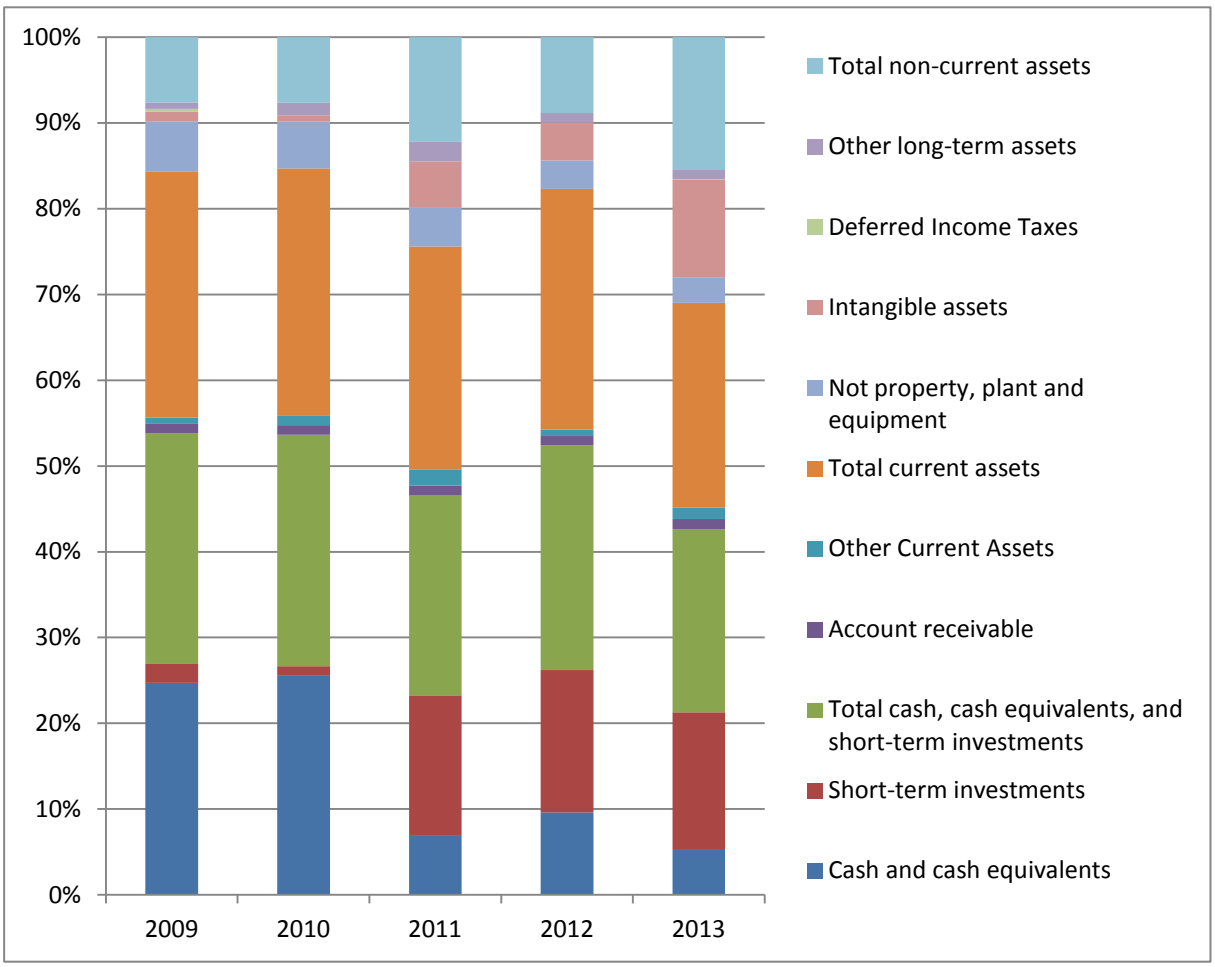
Table 4.1 and figure 4.1 show common-size analysis of income statement of Baidu company. From the table 4.1 and figure 4.1, we can easily see that Baidu company's operating profit makes up percentage more than 60%, it is quite good for a company, and also the data is increasing during first four years, but in 2013, there is a little degreasing, we can see it is because cost of revenue is increased. And about Baidu company's research and development is stable during the five years. The percentage of net income is increasing from 2009 to 2012. But in 2013, it is going down a little bit.

Table 4.2 Vertical common-size analysis of assets

	2009	**2010**	**2011**	**2012**	**2013**
Cash and cash equivalents	68%	70%	18%	26%	14%
Short-term investments	6%	3%	43%	45%	40%
Total cash, cash equivalents, and short-term investments	74%	74%	61%	71%	54%
Account receivable	3%	3%	3%	3%	3%
Other current assets	2%	3%	5%	2%	3%
Total current assets	79%	79%	68%	76%	61%
Not property, plant and equipment	16%	15%	12%	9%	8%
Intangible assets	3%	2%	14%	12%	29%
Deferred income taxes	1%	0%	0%	0%	0%
Other long-term assets	2%	4%	6%	3%	3%
Total non-current assets	21%	21%	32%	24%	39%
Total assets	100%	100%	100%	100%	100%

Source: Own calculation.

Figure 4.2: Vertical common-size analysis of assets



Source: Own calculation.

Table 4.2 and figure 4.2 show common-size analysis of assets of Baidu Company. From table 4.2 and figure 4.2, we can know total current assets dropped down from 79% in 2009 to 61% in 2013, in 2011, total current assets have decreased to 68%, and in 2012 it growth up to 76%, and then it dropped down to 61% again in 2013. It is because of Baidu company increased intangible assets from 2~3% in 2009~2010 to 14% in 2011, so Baidu Company's non-current assets increased in 2011. Besides, Baidu Company also increased other long-term assets to 6%. So we can have a conclusion that there is a big change of Baidu Company's assets structure in 2011. And there is an important point we must see that although sum of total cash, cash equivalents, and short-term investments is stable, we can see from table 4.2, that in first two years the cash and cash equivalents is

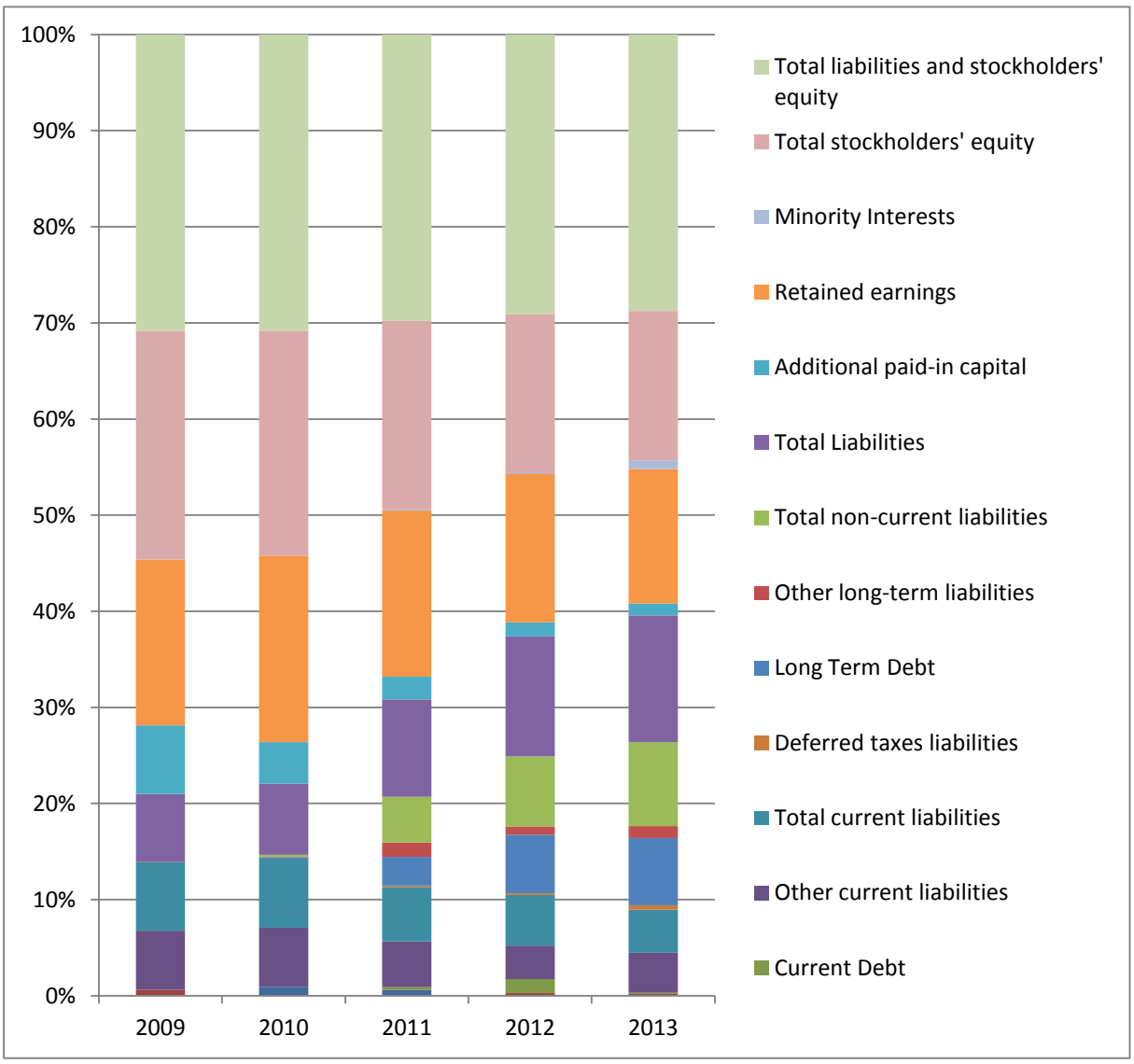
around 60~70%, but in last three years it is only 14~26%. Cause Baidu Company turned cash and cash equivalents to short-term assets. So the short-term assets have a big increasing during 2011-2013.

Table 4.3: Vertical common-size analysis of liabilities and equity

	2009	**2010**	**2011**	**2012**	**2013**
Account payable	-	3%	2%	-	-
Taxes payable	2%	-	-	1%	1%
Current debt	-	-	1%	5%	0.48%
Other current liabilities	20%	20%	16%	12%	14%
Total current liabilities	23%	23%	19%	18%	16%
Deferred taxes liabilities	-	-	0.57%	0.63%	2%
Long term debt	-	0.78%	10%	21%	24%
Other long-term liabilities	0.06%	0.05%	5%	3%	4%
Total non-current liabilities	0.06%	0.82%	16%	25%	30%
Total liabilities	23%	24%	34%	43%	46%
Additional paid-in capital	23%	14%	8%	5%	4%
Retained earnings	56%	63%	58%	53%	49%
Minority interests	-	-	0.42%	0.28%	3%
Total stockholders' equity	77%	76%	66%	57%	54%
Total liabilities and stockholders' equity	100%	100%	100%	100%	100%

Source: Own calculation.

Figure 4.3: Vertical common-size analysis of liabilities and equity



Source: Own calculation.

Table 4.3 and figure 4.3 show us about vertical common-size analysis of liabilities and equity of Baidu Company. In the first two years 2009-2010, there are stable in total stockholders' equity, but in last three years, it had a decreasing, because in 2011-2013, total liabilities had a big increasing. Especially in last three years, we can easily see from the table 4.3 and figure 4.3 that Baidu Company increased their total non-current liabilities from 0% to 30%, among them, long-term debt takes a very big part. In fact, we can see too, from 2011 to 2013 Baidu Company had some changes in their structure of liabilities and equity, argument a

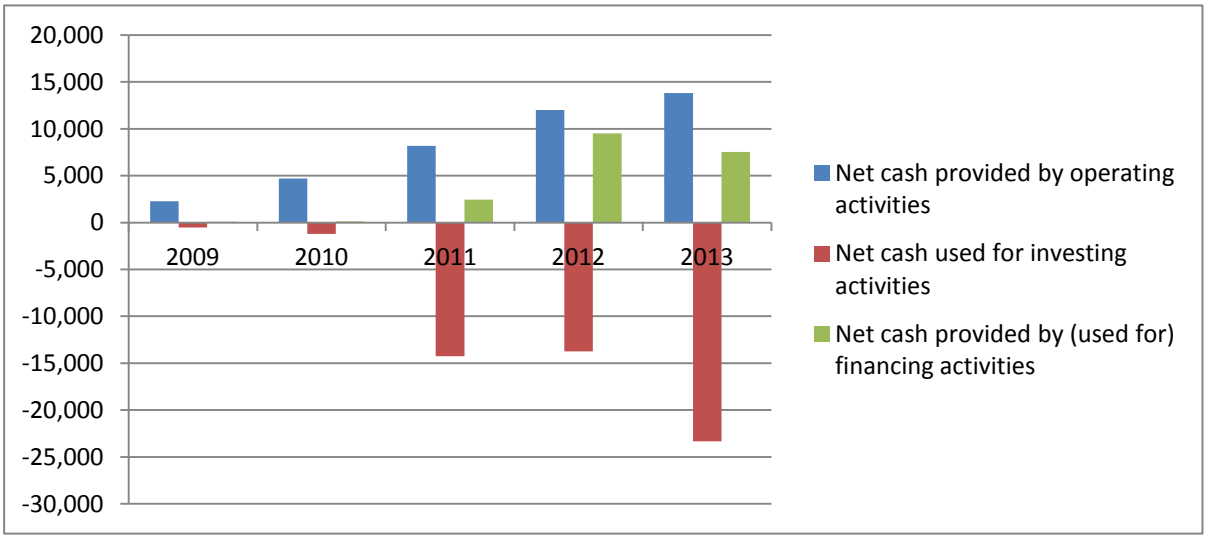
few items. But about retained earnings, there is almost no change in these five years, it is quite stable.

Table 4.4: Vertical common-size analysis of cash flow

	2009	2010	2011	2012	2013
Net cash provided by operating activities	2,279	4,700	8,179	11,996	13,792.97
Net cash used for investing activities	-536	-1,218	-14,251	-13,750	-23,322.82
Net cash provided by (used for) financing activities	95	125	2,426	9,519	7,541.56

Source: Own calculation.

Figure 4.4: Vertical common-size analysis of cash flow



Source: Own calculation.

Table 4.4 and figure 4.4 tells us about general information of Baidu Company's cash flow statement. As we all known that a company's operating activities are company sells products, does something about operating and so on, so that a company can make revenues or some losses. We can see from figure 4.4 that net cash provided by operating activities is increasing during 2009 to 2013, and the results means that Baidu company's operating

activities is cash inflows, so we can know the cash from sales and receivables is more than other cash outflow.

About net cash used in investing activities, we can see from figure 4.4. The results are negative; it means all the investing activities are cash outflow. Also there is a rapidly increasing from 2010 to 2011. It shows us Baidu Company made a lot cash outflow from buy equipment, long-term assets and so on.

The financing activities include common stocks issue, dividends, interests, long-term debt and so on. As we can see from table 4.4 and figure 4.4, there is a big increasing of cash used in financing activities. In these five years, all the cash flow of financing activities are inflow. It means the sum of Baidu company pay dividends, interests or other payments is not higher than Baidu Company received from common stocks issued or others. It tells us the company got more money than it has to pay out.

4.1.2 Horizontal common-size analysis.

In horizontal common-size analysis, we will use the year 2009 as the base year, and also we will restate last four years relative to 2009.

Table 4.5: Horizontal common-size analysis of income statement

	2009	2010	2011	2012	2013
Revenue	100%	178%	326%	502%	718%
Cost of revenue	100%	133%	241%	399%	710%
Gross operating profit	100%	204%	374%	560%	723%
Research and development	100%	170%	316%	545%	972%
Sales, general and administrative	100%	135%	211%	311%	643%
Total operating expenses	100%	147%	247%	392%	757%
Operating income before interest and taxes	100%	247%	472%	689%	697%
Non-operating income	100%	131%	297%	1169%	1271%
Income before income taxes	100%	241%	464%	711%	724%
Provision for income taxes	100%	271%	600%	795%	924%
Net income from continuing operations	100%	237%	446%	700%	697%
Net income	100%	237%	447%	704%	708%

Source: Own calculation.

Table 4.5 shows us horizontal common-size analysis of Baidu Company's income statement. From table 4.5, we can know all these items had increased during 2009 to 2013, especially in 2011 and 2012, there is very big growth. As we can see every item in 2011 almost increased twice times compare to 2010. After, the rate of growth is constantly going up. It means Baidu Company had a quite good development during these five years, and is in good condition.

Table 4.6: Horizontal common-size analysis of assets

	2008	2009	2010	2011	2012
Cash and cash equivalents	100%	185%	98%	283%	231%
Short-term investments	100%	99%	2637%	5406%	7539%
Total cash, cash equivalents, and short-term investments	100%	178%	310%	709%	839%
Account receivable	100%	181%	365%	763%	1352%
Other current assets	100%	335%	1096%	959%	2440%
Total current assets	100%	181%	327%	716%	889%
Not property, plant and equipment	100%	163%	275%	390%	538%
Intangible assets	100%	96%	1797%	2934%	11001%
Deferred income taxes	100%	91%	154%	158%	290%
Other long-term asset	100%	449%	1397%	1647%	2067%
Total non-current assets	100%	172%	570%	837%	2127%
Total assets	100%	179%	379%	742%	1153%

Source: Own calculation.

We can get some information about horizontal common-size analysis of assets from table 4.6. From this, it is not hard to see from 2009 to 2013, short-term investment had a striking change, short-term investment in 2013 is 7539% higher than 2009. So does the intangible assets, it in 2013 is 11001% higher than 2009. Also other items increased a lot during the five years expect cash and cash equivalents in 2011; it has a little bit decreasing, because Baidu Company put more money in short-term investment. And deferred income taxes are more stable than others. It is indeed good news for Baidu company itself.

Table 4.7: Horizontal common-size analysis of liabilities and equity

	2008	2009	2010	2011	2012
Account payable	-	100%	153%	-	-
Taxes payable	100%	-	-	288%	290%
Current debt	-	-	100%	1263%	200%
Other current liabilities	100%	180%	302%	450%	819%
Total current liabilities	100%	182%	315%	588%	788%
Deferred taxes liabilities	-	-	100%	220%	912%
Long term debt	-	100%	2649%	11271%	20034%
Other long-term liabilities	100%	120%	29704%	33600%	74661%
Total non-current liabilities	100%	2193%	87766%	274148%	518748%
Total liabilities	100%	188%	573%	1397%	2319%
Additional paid-in capital	100%	109%	124%	147%	214%
Retained earnings	100%	202%	395%	699%	1003%
Minority interests	-	-	100%	129%	2290%
Total stockholders' equity	100%	177%	322%	548%	808%
Total liabilities and stockholders' equity	100%	179%	379%	742%	1153%

Source: Own calculation.

The results of Baidu Company horizontal common-size analysis of liabilities and equity is shown at table 4.7. Let us take a look about current debt and in first two years, Baidu Company had no debt; but during 2011 to 2012, it grew up to 1262%. And then in 2013 it dropped down to 200%. Besides we should notice total non-current liabilities had a huge change during last three years. In the end of 2013, it went up to 518748%. As we know, it means Baidu Company took a very different strategy to before. It shows the company began borrowing a lot of money from banks or other companies. It is a risky behavior but also it can take a lot of revenue to the company. Although other items are all increasing galloping, we

can also see additional paid-in capital is quite smoothly.

4.2 Financial ratio analysis

As we mentioned at chapter 2 before, financial ratio analysis have four main types which are liquidity ratios, activity ratios, solvency analysis and profitability ratios. In this part, we will calculate financial ratios for each group basis on data from 2009 to 2013.

4.2.1 Liquidity ratios

By using formulas 2.5, 2.6 and 2.7, we can get the following results see table 4. 8, 4.9 4.10.

Table 4.8: Current ratio

	2009	**2010**	**2011**	**2012**	**2013**
Total current assets	4,843	8,782	15,848	34,674	43,029.15
Total current liabilities	1400	2552	4407	8237	11,032.83
Current ratio	3.46	3.44	3.6	4.21	3.9

Source: Own calculation.

We can see from this table, during the five years, the current ratios are all more than 1, it is quite strong. During the five years, all of this current ratio is increasing. In first three years, we can see that current ratio is around 3.3-3.5, and in 2012 it raised to 4.21. It means Baidu Company increased its current assets more than liabilities. And then it went down to 3.9 in 2013.

Table 4.9 Quick ratio

	2009	2010	2011	2012	2013
Total cash, cash equivalents, and short-term investments	4,581	8,158	14,179	32,485	38,426.56
Account receivable	164	297	600	1,253	2,220.85
Total current liabilities	1,400	2,552	4,407	8,237	11,032.83
Quick ratio	3.39	3.31	3.35	4.1	3.68

Source: Own calculation.

It is not hard to see from table 4.9 that the quick ratio is going up during the first four years. And in last year, there is a little decreasing to 3.68. But all of them are higher than 3, it means Baidu Company has a very strong ability to turn these receivables and investments to cash, also it is stable; it is good news for itself. And in 2013, the decreasing of quick ratio is because the speed of total current liabilities the increasing becomes slow.

Table 4.10: Cash ratio

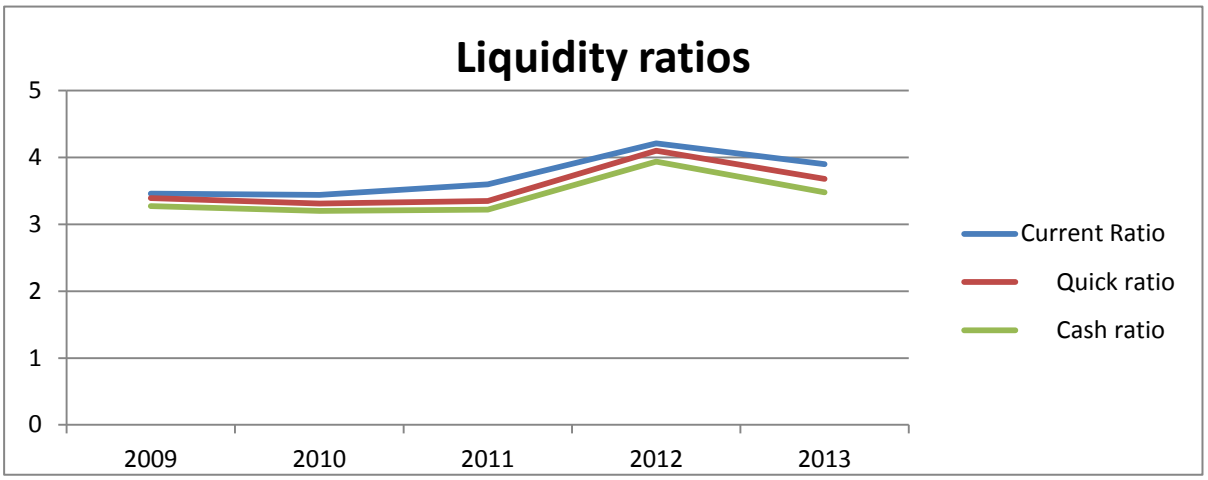
	2009	2010	2011	2012	2013
Cash and cash equivalents	4,200	7,782	4,127	11,881	9,691.80
Short-term investments	381	376	10,052	20,604	28,734.76
Total current liabilities	1,400	2,552	4,407	8,237	11,032.83
Cash ratio	3.27	3.2	3.22	3.94	3.48

Source: Own calculation.

Table 4.10 shows us about Baidu Company's cash ratio, we can see in 2009 and 2010 the cash ratio is around 3 which mean the company has a great ability to meet its current obligations with cash, cash equivalents and short-term investments. But in 2011, 2012 and 2013, we should notice a very big change in short-term investments. Although cash ratio is almost the same to before, we can see from table 4.14, in 2011 cash and cash equivalents were

going down from 7782 to 4127, and at the same time, short-term investments were striking going up to 10052. So that cash ratio can keep the same to before. Also the situation happened in 2012 and 2013. From these we know Baidu Company has a good ability to arrange its assets and control its cashability.

Figure 4.5: Liquidity ratios



Source: Own calculation.

As we can see from figure 4.5 that the tendency of these three ratios is very similar, it is because cash, cash equivalents, short-term investments, and account receivables are all in current assets. And they were stably going up during the five years, which means Baidu Company has good liquidly and strong ability to repay its debts in a short time.

4.2.2 Activity ratio

By using formulas 2.8, 2.9., 2.12, 2.13, 2. 14, 2.15 we calculate following results see the tables.

Table 4.11: Total asset turnover

	2009	2010	2011	2012	2013
Total asset turnover	0.88	0.92	0.84	0.65	0.55

Source: Own calculation.

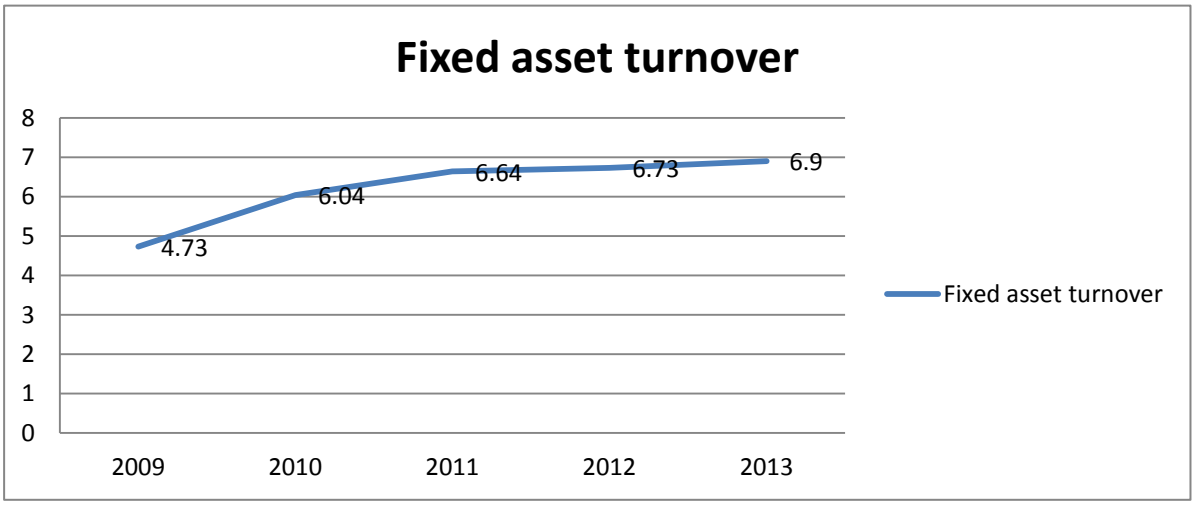
Generally speaking, total assets turnover means a company if able to turn its assets to sales in a short time. We can see from table 4.11 that during the five years, Baidu Company's total asset turnover was going down, which means Baidu Company's increase of short-term assets' percentage in these five years.

Table 4.12: Fixed asset turnover

	2009	2010	2011	2012	2013
Fixed asset turnover	4.73	6.04	6.64	6.73	6.9

Source: Own calculation.

Figure 4.6: Fixed assets turnover

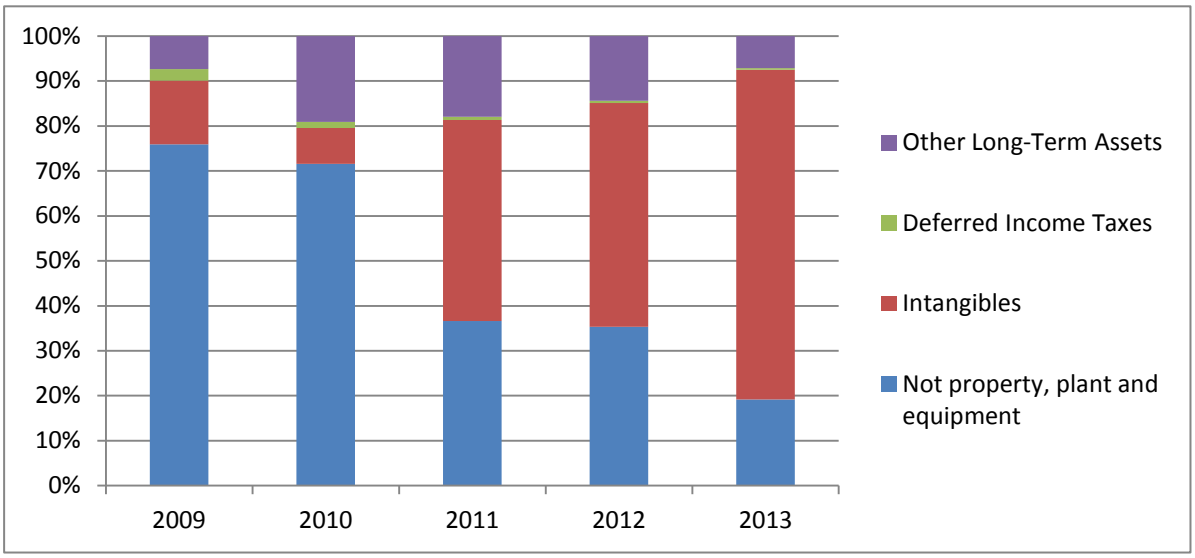


Source: Own calculation.

From table 4.12 and figure 4.6, we can see the fixed asset turnover is stably increasing during the five years. It is not hard to see from 2009 to 2010, there is a big increasing from

4.73 to 6.04, and then in last four years, fixed asset turnover is quite stable around 6.5. We can find the reason from figure 4.7.

Figure 4.7: Fixed assets



Source: Own calculation.

Obviously, we can see in 2011 and 2013, the intangible assets had a big growth, took more percentage in total fixed assets, which tells us Baidu Company used more intangible assets to get revenues such as brand effect and so on. And caused Baidu Company's fixed turnover goes up in 2011, 2012 and 2013.

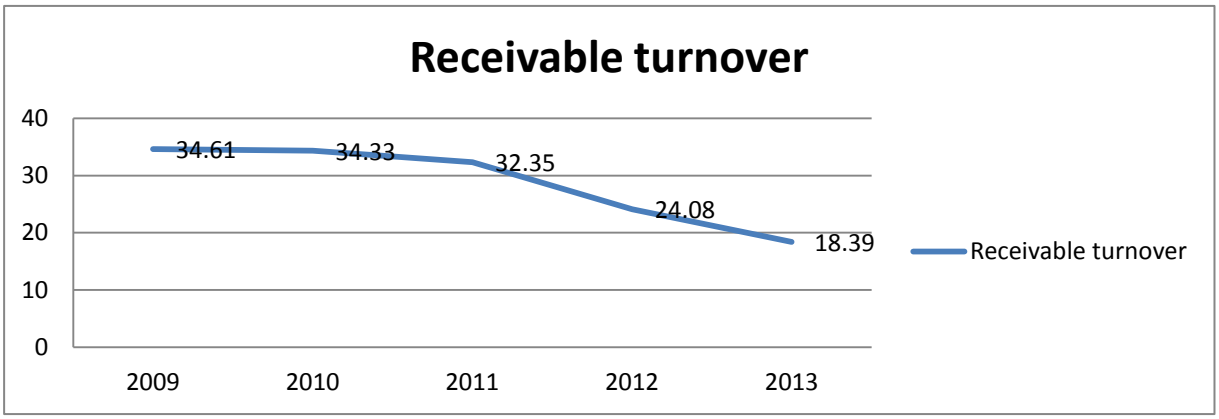
Because Baidu Company is a Network virtual company, it does not produce physical commodity, which means there is no inventories. So we cannot calculate its inventory turnover.

Table 4.13: Receivable turnover

	2009	**2010**	**2011**	**2012**	**2013**
Receivable turnover	34.61	34.33	32.35	24.08	18.39

Source: Own calculation.

Figure 4.8: Receivable turnover



Source: Own calculation.

We get above results by using formula 2.12, we can easily see that receivable turnover is dropping down during the five years from 34,61 to 18,39. Generally speaking, receivable turnover measures how fast a company can sell products and reloan its money. So we can know Baidu Company's this ability is not that strong than before, because its account receivables increased quickly than its revenues.

Table 4.14: Day's sales in receivables

	2009	2010	2011	2012	2013
Sales in Receivables	13.46	13.7	15.1	20.5	14.38

Source: Own calculation.

We convert it to days, the ratio makes more sense comparing to receivable turnover.

Table 4.15: Payables turnover

	2009	2010	2011	2012	2013
Payables turnover	0	26.83	32.08	0	0

Source: Own calculation.

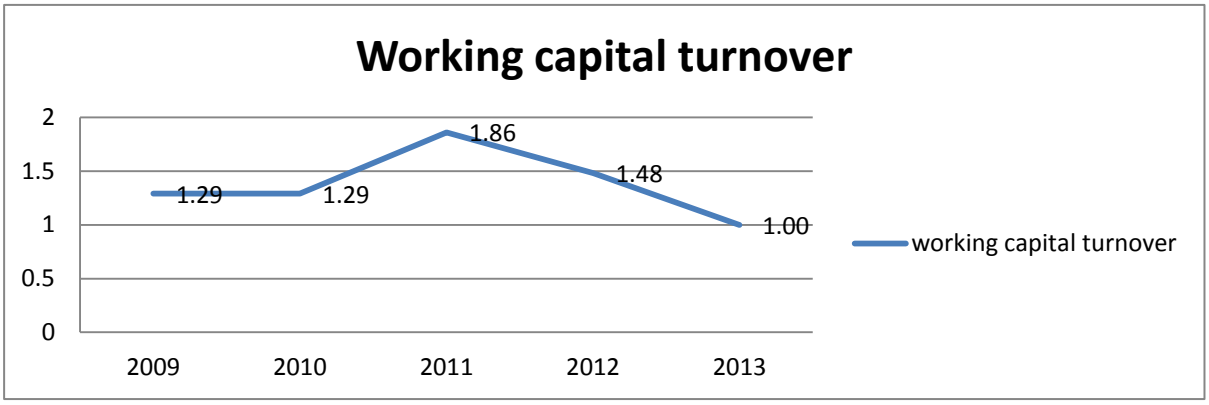
We should have a look at 2009, 2012 and 2013; its payables turnover is 0. Because of in 2009, 2012 and 2013, Baidu Company's account payables are 0. And from 2010 to 2011, Baidu Company's payables turnover goes up from 26.83 to 32.08. All of these are tells us Baidu Company has highly ability to pay its payables.

Table 4.15: Working capital turnover

	2009	**2010**	**2011**	**2012**	**2013**
Total current assets	4,843	8,782	15,848	34,674	43,029
Total current liabilities	1,400	2,552	4407	8237	11,033
Working capital	3443	6230	11441	26437	31,996
Revenues	4,448	7,915	14,501	22,306	31,944
working capital turnover	1.29	1.29	1.86	1.48	1.00

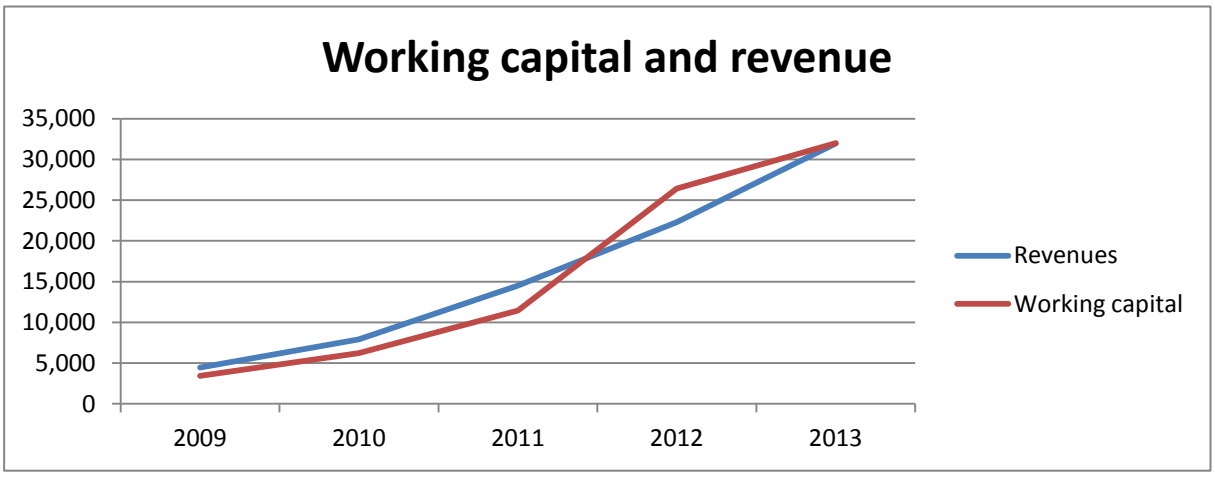
Source: Own calculation.

Figure 4.9: Working capital turnover



Taken formula 2.15 into account, we can get above results. From table 4.15 and figure 4.9, it's not hard to see there is a decreasing during the five years. From 2009 to 2010, the working capital turnover is quite stable around 1.29. And then we can notice from 2010 to 2011, there is a big change, increased 1.29 to 1.86. After that from 2011 to 2013 the working capital turnover dropped down to 1.00. We can figure out from following figure 4.10.

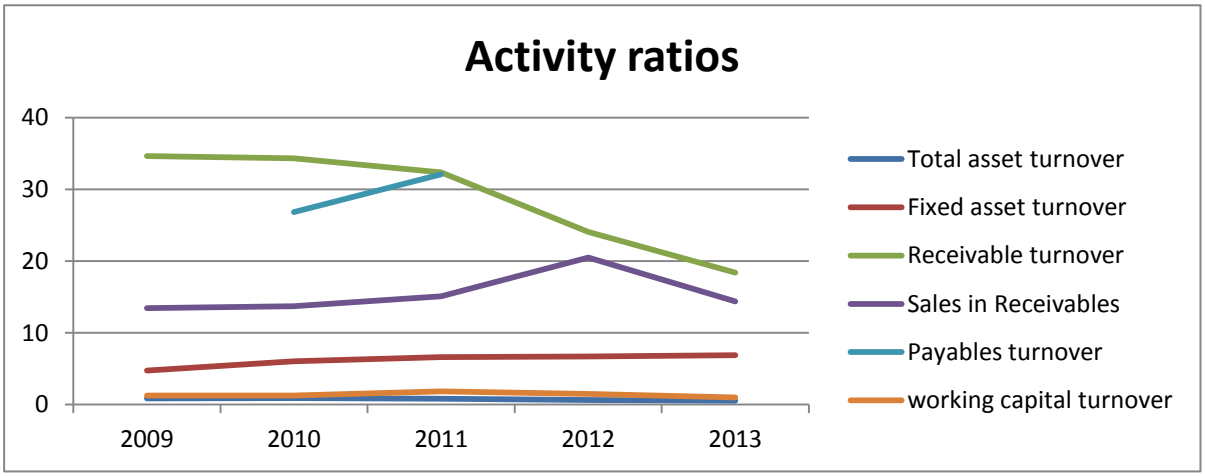
Figure 4.10: Working capital and revenue



Source: Own calculation.

Obviously, we can see from 2009 to 2011, the increase of revenues is not that fast to working capital. And from 2011 to 2013, easily we can find the reason that the degree of increasing of revenue during these three years is really similar. But the working capital went up suddenly from 2011 to 2012, even higher then revenue in the end. So we can know why the working capital turnover went down in 2012.

Figure 4.11: Activity ratios



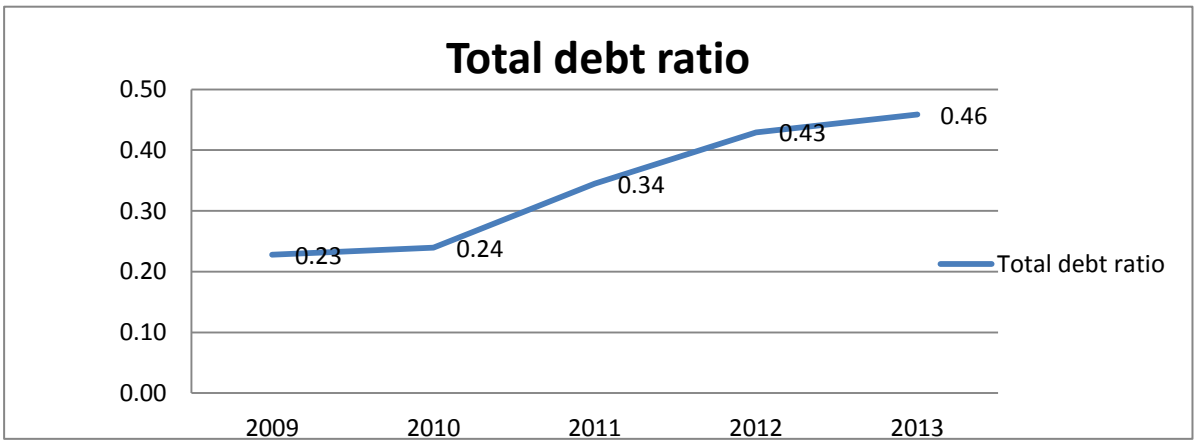
Source: Own calculation.

From figure 4.11, we can see that receivable turnover and sales in receivables are the most changeable ratio in all of them. Other ratio is relatively stable. Anyway, it is a good situation for the company.

4.2.3 Solvency ratio

Taken formula 2.16, 2.17, 2.18, and 2.19 into account, we can get above results

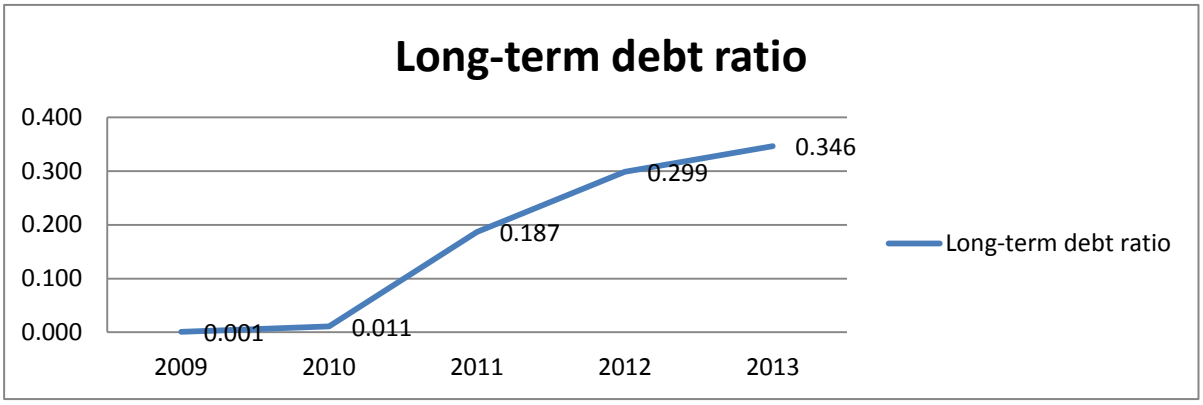
Figure 4.12: Total debt ratio



Source: Own calculation.

From figure 4.12 we can get some useful information that in first two years 2009, 2010, there is a very small increasing from 0.23 to 0.24, so we can know during this time, the total debt ratio is quite stable. But from 2010 to 2013, we can notice the jumping increasing of total debt ratio from 0.24 to 0.46. It is because Baidu Company increased its liabilities in 2011 and 2013.

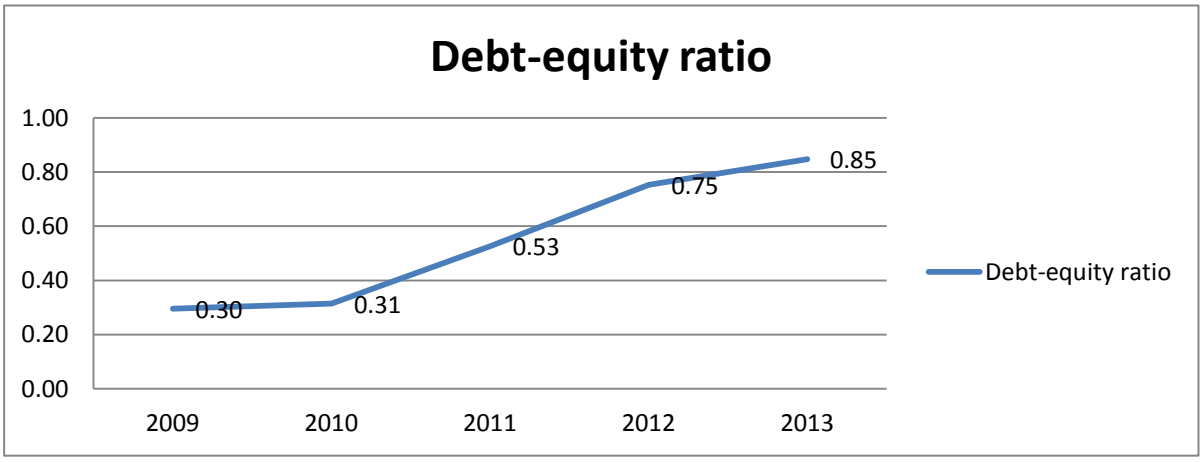
Figure 4.13: Long-term debt ratio



Source: Own calculation.

We can get above results by using formula 2.17. And we can see from figure 4.29 that in 2009 and 2010, the long-term debt ratios are almost zero. Because of during these three years, the financial crisis made many banks are broken up, so Baidu Company had very less long-term debt even no. But we can see from 2011 to 2013, there is a very obvious increasing, from 0.0187 to 0.346. It means that Baidu Company had increased its long-term debt. And on the whole, even Baidu Company had a big growing in last two years; we still can see Baidu Company's long-term debt ratios are very low. So we can know Baidu Company has a very good financial position.

Figure 4.14: Debt-equity ratio



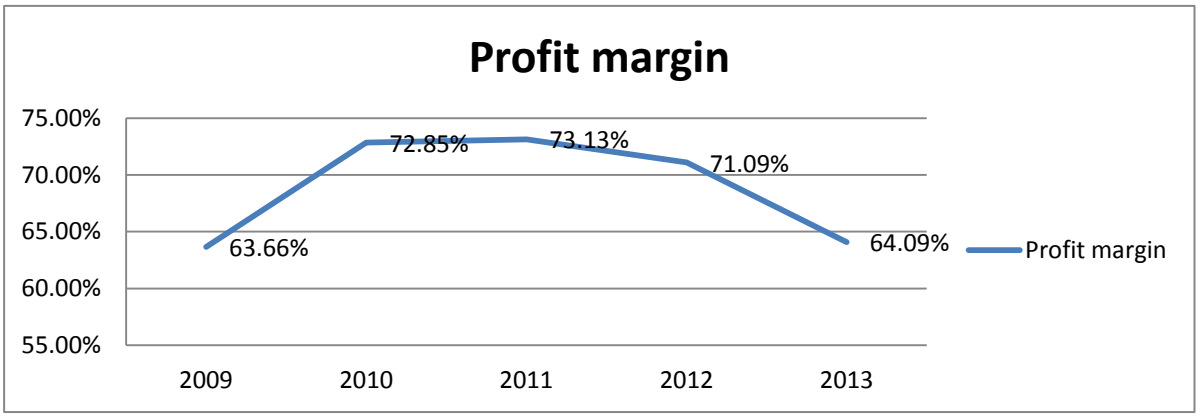
Source: Own calculation.

From figure 4.14, we can see the tendency of debt-equity ratio is growing up during the five years in general. The reason is Baidu Company's total debt increased more quickly than its total shareholder equity.

4.2.4 Profitability ratios

By using formula 2.20, 2.21, and 2.22, we can get the results.

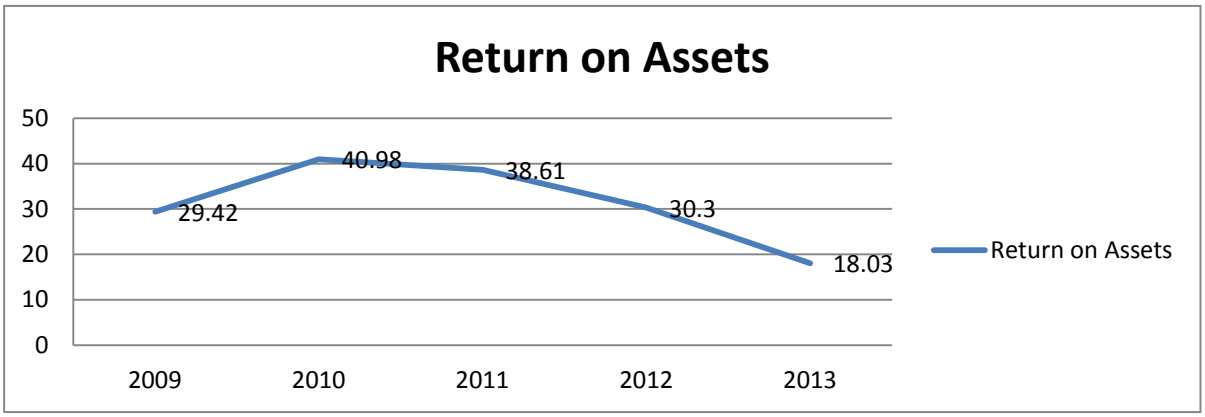
Figure 4.15: Profit margin



Source: Own calculation.

In general, it is not hard to see that the company's profit margin grows up in the first three years. And then in 2012 and 2013, there is a big decreasing, back to 64.09%. In 2009 after financial crisis, the business got better, so the company get make more profits. And in 2012 and 2013, it is because of the company increase its cost of development; the company can't make that much profit. But even so, Baidu Company's profit margin is quite high during the five years, around 65%-70%, it shows us that 65%-70% profit for per product in sales.

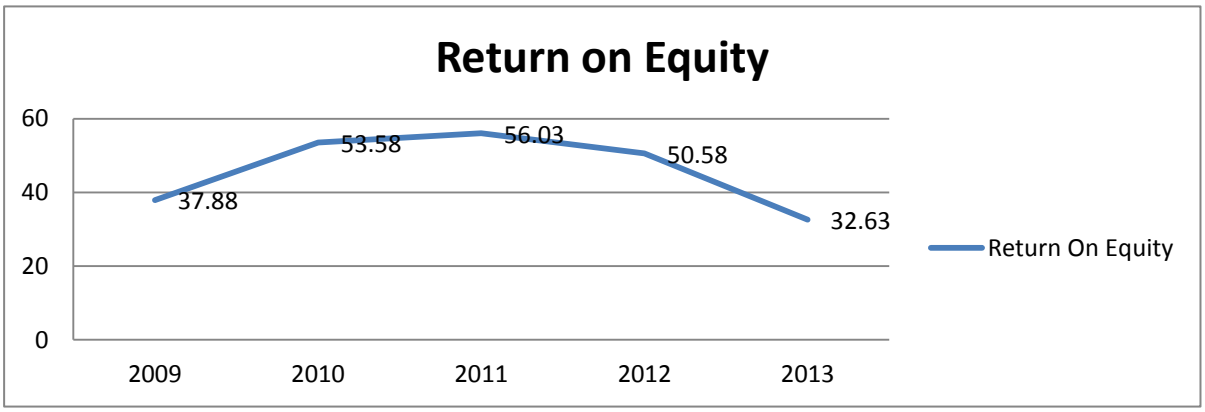
Figure 4.16: Return on assets



Source: Own calculation.

In a whole, we can get some important information from figure 4.16. From 2009 to 2010, the company's return on assets is growing up from 29.42 to 40.98. However from 2010 to 2013, the return on assets is going down from 40.98 to 18.03. It is because of the rate of increase in net income is faster than its in total assets during first two years, and in last three years, it is opposite.

Figure 4.17: Return on equity



Source: Own calculation.

On the whole, we can see from figure 4.17, the return on equity is increasing during 2009 to 2011. In the first three years, it is going up. We can know it might because after financial crisis, the economic is getting better and better, the market environment is very suit

for company's developing. Baidu Company can catch this chance to develop and make more profits, so its net income had increased. But in 2012 and 2013, there is a little falling from 56.03 to 32.63. It is because Baidu Company's equity grows faster than its net icome in 2012 and 2013. It has more retained earnings.

4.3 DuPont analysis

We have calculated a lot of financial ratio, now it's time to use DuPont analysis to compare the company's different data in different time period.

As we mentioned in chapter 2, ROE measures the return a company generates on its equity capital. Also we have calculated Baidu Company's ROE during 2009 to 2013. And now we can use DuPont analysis to look at component this return. It can be divided into several parts which are profit margin, total assets turnover, and financial leverage. We will put the ROA and financial leverage together as ROE, which we mentioned in chapter2.

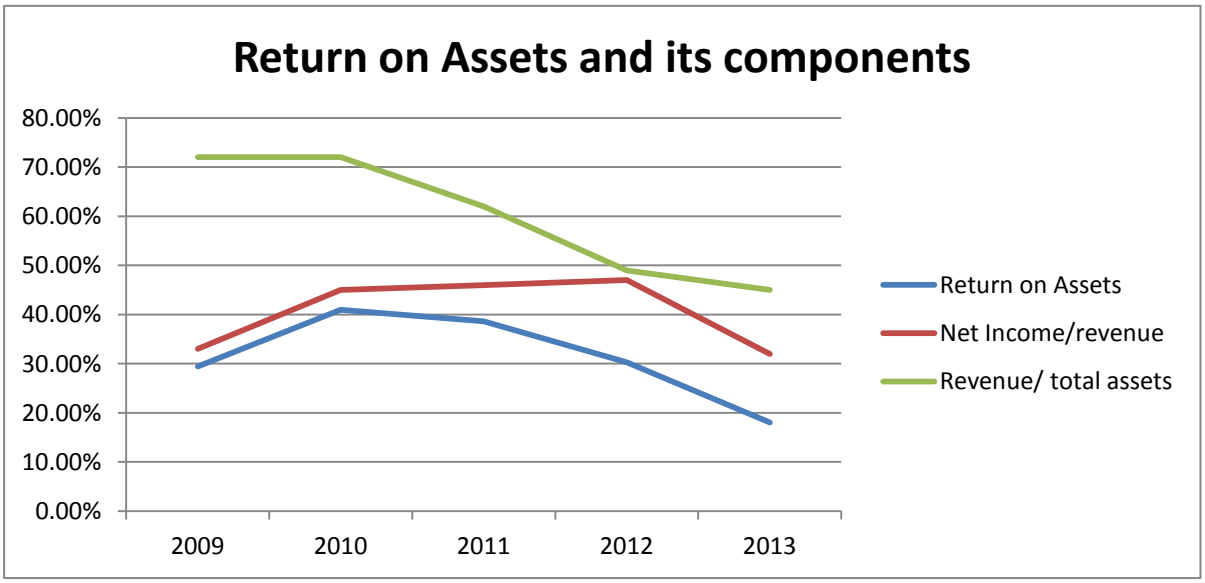
DuPont analysis can help enterprise management more clearly see the determinants of return on equity capital, and the sales net profit margin and total asset turnover, the correlation relationship between the debt ratio, provides a clear overview to management whether the company assets management efficiency and maximize shareholder returns roadmap. By using formula 2.23 and 2.24 we can get following results.

Table 4.16: ROE and ROA

	2009	2010	2011	2012	2013
Total Assets	6,157	11,048	23,341	45,669	70,986
Net Income	1,485	3,525	6,620	10,391	10,356
Revenue	4,448	7,915	14,501	22,306	31,944
Total stockholders' equity	4,753	8,406	15,292	26,055	38,425
Return On Equity	37.88	53.58	56.03	50.58	32.63
Return on Assets	29.42	40.98	38.61	30.3	18.03
Net Income/revenue	33%	45%	46%	47%	32%
Revenue/ total assets	72%	72%	62%	49%	45%
total assets/total stockholders' equity	130%	131%	153%	175%	185%

Source: Own calculation.

Figure 4.17: Return on Assets and its components

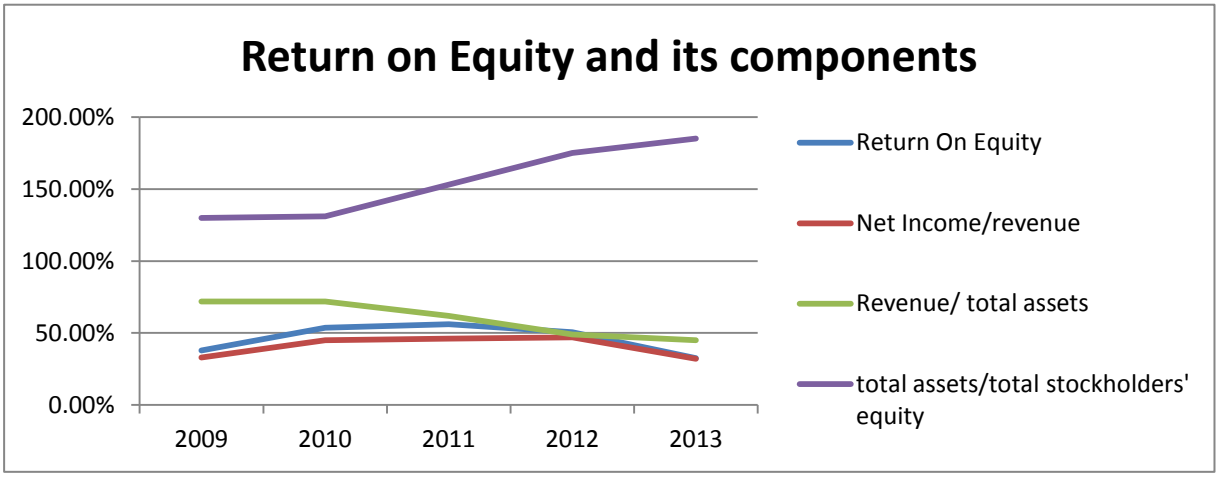


Source: Own calculation.

From table 4.16 and figure 4.17, we can easily see that Baidu Company's ROA is going up in first three years, and then it is going down in 2011, 2012and 2013. It is because of the terribly decreasing of the total assets turnover in 2010 to 2013, even though the profit margin

had a little increased in last four years, but its degree is not much than total assets turnover's decreasing.

Figure 4.18: ROE and its components



Source: Own calculation.

In general, it is not hard to see that the company's ROE, profit margin and financial leverage is increasing from figure 4.18. Only total assets turnover is decreasing. And from these tendencies of different data, we can see the profit margin is most effective on ROE.

Loosely speaking, Baidu Company has a very good management on its assets, and also has a quite good ability to make profit. Because its profit margin is around 40% during these five years, and also has a good develop tendency. And its long-term debt ratio is quite low above 30%. It means Baidu Company has a great risk control on itself. In a whole word, Baidu Company has a very well developing.

4.3.1 Analysis of gradual changes

In this part, we will calculate the results of gradual changes to analysis Baidu Company's financial position.

Table 4.17: Change of 2009 to 2013

	2009	2010	2011	2012	2013
Return on equity	37.88%	53.58%	56.03%	50.58%	32.63%
Absolute change	X	-15.70%	-2.45%	5.45%	17.95%
Index of change	X	41.45%	4.57%	-9.73%	-35.49%

Source: Own calculation.

In table 4.17, we can see the absolute change of ROE is negative in 2010 and 2011; the index of change from 2010 to 2013 has decreased from 41.45% to -35.49%.

We all know that the effects of quantization, including four possible ways to gradual changes decompose excess of the number of decomposition and functional decomposition Method. In this work, we will only focus on one method, which is a method of gradual changes

According to the formula 2.25 and table 4.37, we can calculate the change of component ratios in each period as follows.

Table 4.18: Method of gradual changes from 2009 to 2010

	a2009	a2010	Δa	ΔX_{ai}
$a_1 = EAT / \text{Re}venue$	0.334	0.445	0.111	10.43%
$a_2 = \text{Re}venue / Assets$	0.722	0.716	-0.006	-0.26%
$a_2 = Assets / Equity$	1.295	1.314	0.019	0.61%
Sum	X	X	X	10.78%

Source: Own calculation.

From the table 4.18, we can know the net profit margin and financial leverage, which

are a1 and a3, had increased by 11.1 and 1.9 percentage points from the year 2009 to 2010, and the growth of total assets turnover had decreased by 0.6 percentage points. By using formula 2.24, the method of gradual changes is shown in the table. It is not hard for us to see that profit margin has contributed most to the ROE changes, and the second one is financial leverage, the last one is total assets turnover which has a negative influence on ROE.

Table 4.19: Method of gradual changes from 2010 to 2011

	a2010	a2011	Δa	ΔX_{ai}
$a_1 = EAT / \text{Re}venue$	0.445	0.458	0.012	1.17%
$a_2 = \text{Re}venue / Assets$	0.716	0.621	-0.095	-5.57%
$a_2 = Assets / Equity$	1.314	1.526	0.212	6.03%
Sum	X	X	X	1.63%

Source: Own calculation.

From table 4.19, we can see that from 2010 to 2011, the situation is very similar to last one. Also the net profit margin and the financial leverage had gone up by 1.2 and 21.2 percentage points. And the total assets turnover had decreased by a negative 9.5 percentage points. But there is a little difference, which is the most contribution part to ROE is the financial leverage. The second one is profit margin. As for total assets turnover, it still has negative influence on ROE.

able 4.20: Method of gradual changes from 2011 to 2012

	a2011	a2012	Δa	ΔX_{ai}
a_1 = *EAT* / Re *venue*	0.458	0.469	0.011	1.04%
a_2 = Re *venue* / *Assets*	0.621	0.488	-0.133	-10.66%
a_2 = *Assets* / *Equity*	1.526	1.753	0.226	5.18%
Sum	X	X	X	-4.44%

Source: Own calculation.

It is not hard to see the change of 2011 to 2012 is almost the same to 2010 to 2011. Total assets turnover still is negative, and even lower than before, which makes the sum of the changes among these two years is negative. And the financial leverage still is the most important to ROE, also.

Table 4.21: Method of gradual changes from 2012 to 2013

	a2012	a2013	Δa	ΔX_{ai}
a_1 = *EAT* / Re *venue*	0.469	0.329	-0.139	-11.94%
a_2 = Re *venue* / *Assets*	0.488	0.450	-0.038	-3.33%
a_2 = *Assets* / *Equity*	1.753	1.847	0.095	1.40%
Sum	X	X	X	-13.86%

Source: Own calculation.

From table 4.21, we can know unfortunately the net profit margin and total assets turnover are all negative, which are -13.9% and -3.8%. But financial leverage is 9.5%. So we can get such information that the most contributed to ROE is financial leverage. And the profit margin and total assets turnover are all negative influence on ROE. So the sum of the

changes during the two years is very low.

In a whole word, from the analysis of gradual changes, we can see from 2010 to 2013, the financial leverage was the most important ratio to contribute to the growth of ROE. However, at the same time, the total assets turnover played the most important role in contributing to the ROE change.

5 Conclusion

This thesis analyzed the financial statement of Baidu Company. The objective of the thesis was to assess the financial performance of Baidu Company. The financial performance was evaluated by financial analysis, including common-size analysis, financial ratio analysis and DuPont analysis, during the period from 2009 to 2013.

By analyzing the financial statements of Baidu Company, we should notice some important points. First, Baidu Company developed quite fast during these five years; we can see its revenue was increasing times. Second, Baidu Company had a very good ability to arrange its assets to make more space to develop; we can see it had very good liquidity and can pay its payables. Third, during the period Baidu Company had a high goodwill, cause its intangible assets growth up quickly. Finally, innovation is very important to Baidu Company, because its research and development cost is increasing in recent years.

The overall results of this study suggests that even Baidu Company is a big and fast develop company, but they still should pay attention to its liquidity and profitability. Besides, due to the keep the leading position and Compete with foreign companies, Baidu Company needs to research or create new technology according to the customers' demand, which can make their products or services more competitive in order to make more profits. All in all, Baidu Company should not only expand its business in China, but also research or create new energy to make it more and more competitive to other more powerful foreign companies.

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[3] http://en.wikipedia.org/wiki/Financial_analysis

List of Abbreviations

ROA Return on Assets

ROE Return on Equity

EBIT Earnings before Interest and Tax

EAT Earning after Tax

List of Tables

Table 4.21: Method of gradual changes from 2012 to 2013

List of Figures

Declaration of Utilization of Results from a Diploma (Bachelor) Thesis

Herewith I declare that

- I am informed that Act No. 121/2000 Coll. – the Copyright Act, in particular, Section 35 – Utilization of the Work as a Part of Civil and Religious Ceremonies, as a Part of School Performances and the Utilization of a School Work – and Section 60 – School Work, fully applies to my diploma (bachelor) thesis;
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胡雅琳 YLSHUANG HU

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Student´s name and surname

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List of Annexes

Annex 1 Income Statement (in million CNY)

Income Statement					
	2009	**2010**	**2011**	**2012**	**2013**
Revenue	4,447.78	7,915.07	14,500.79	22,306.03	31,943.92
Cost of Revenue	1,616.24	2,149.29	3,896.88	6,448.55	11,471.84
Gross Operating Profit	**2,831.54**	**5,765.79**	**10,603.90**	**15,857.48**	**20,472.09**
Operating expenses					
Research and development	422.62	718.04	1,334.43	2,304.83	4,106.83
Sales, general and administrative	803.99	1,088.98	1,692.81	2,501.34	5,173.53
Staff cost	-	-	-	-	-
Depreciation and amortization	-	-	-	-	-
Other Operating Expenses	0	0	0	0	0
Total Operating Expenses	1,226.60	1,807.02	3,027.24	4,806.16	9,280.37
Operating income before interest and taxes	**1,604.94**	**3,958.77**	**7,576.66**	**11,051.32**	**11,191.72**
Non-operating income	78.18	102.4	232.52	914.12	993.3
Income before income taxes	1,683.12	4,061.16	7,809.18	11,965.44	12,185.02
Provision for income taxes	198.02	536	1,188.86	1,574.16	1,828.93
Net income from continuing operations	1,485.10	3,525.17	6,620.32	10,391.28	10,356.09
Net Income	**1,485.10**	**3,525.17**	**6,638.64**	**10,456.03**	**10,518.97**
Net income available for common shareholders	1,485.10	3,525.17	6,638.64	10,456.03	10,518.97
Earnings per share					

Basic	4.3	10.13	19.03	29.93	30.07
Diluted	4.27	10.1	18.99	29.89	30.02

Annex 2 Balance Sheet (in million CNY)

Balance Sheet					
	2009	**2010**	**2011**	**2012**	**2013**
Assets					
Current Assets					
Cash, cash equivalents, and short-term investments					
Cash and cash equivalents	4,199.89	7,781.98	4,127.48	11,880.63	9,691.80
Short-term investments	381.15	376.49	10,051.58	20,604.22	28,734.76
Total cash, cash equivalents, and short-term investments	**4,581.04**	**8,158.47**	**14,179.06**	**32,484.86**	**38,426.56**
Accounts receivable	164.22	296.9	599.56	1,253.48	2,220.85
Inventory	-	-	-	-	-
Other Current Assets	97.61	327.08	1,069.54	935.75	2,381.75
Total current assets	**4,842.87**	**8,782.45**	**15,848.16**	**34,674.09**	**43,029.15**
Non Current Assets					
Not property, plant and equipment	997.56	1,622.41	2,744.24	3,887.88	5,370.27
Equity and other investments	-	-	-	-	-
Intangibles	186.29	179.48	3,348.05	5,465.23	20,494.67
Deferred Income Taxes	33.8	30.84	52.13	53.3	97.94
Other Long-Term Assets	96.46	433.25	1,347.97	1,588.39	1,993.77
Total non-current assets	**1,314.10**	**2,265.99**	**7,492.39**	**10,994.80**	**27,956.64**
Total Assets	**6,156.98**	**11,048.44**	**23,340.54**	**45,668.89**	**70,985.79**
Liabilities and stockholders' equity					

Liabilities					
Current Liabilities					
Accounts Payable	-	295.43	452.44	-	-
Taxes Payable	147.66	-	-	425.32	428.8
Current Debt	-	-	171.88	2,170.98	343.63
Other current liabilities	1,252.07	2,256.42	3,782.23	5,640.23	10,260.40
Total current liabilities	**1,399.72**	**2,551.85**	**4,406.55**	**8,236.53**	**11,032.83**
Non-current liabilities					
Deferred taxes liabilities	-	-	131.63	289.48	1,200.27
Long Term Debt	-	86	2,277.93	9,693.28	17,229.35
Other long-term liabilities	4.15	5	1,232.72	1,394.38	3,098.43
Total non-current liabilities	**4.15**	**91**	**3,642.28**	**11,377.13**	**21,528.05**
Total Liabilities	**1,403.87**	**2,642.85**	**8,048.83**	**19,613.66**	**32,560.87**
Stockholders' equity					
Common stock	0.02	0.02	0.02	0.02	0.02
Additional paid-in capital	1,426.07	1,557.26	1,771.77	2,095.27	3,056.42
Other reserves	-	-	-	-	-
Retained earnings	3,440.53	6,965.70	13,604.33	24,038.22	34,525.39
Minority Interests	-	-	97.82	126.61	2,240.34
Total stockholders' equity	**4,753.10**	**8,405.59**	**15,291.72**	**26,055.23**	**38,424.92**
Total liabilities and stockholders' equity	**6,156.98**	**11,048.44**	**23,340.54**	**45,668.89**	**70,985.79**

Annex 3 Cash Flow (in million CNY)

Cash Flow					
	2009	**2010**	**2011**	**2012**	**2013**
Cash Flows From Operating Activities					
Net Income	1,485.10	3,525.17	6,620.32	10,391.28	10,356.09
Depreciation and amortization	317.01	441.35	884.91	1,515.34	2,651.99
Deferred income taxes	-10.84	-74.37	-64.7	-59.03	330.64
Accounts receivable	-58.63	-226.97	-433.54	-1,133.11	-773.84
Inventory	-	-	-	-	-
Account payable	-	-	-	340.34	2.12
Other working capital	465.33	973.06	1,025.99	1,573.74	1,739.03
Other non-cash items	81.47	62.25	145.83	-632.56	-513.05
Net cash provided by operating activities	**2,279.44**	**4,700.48**	**8,178.82**	**11,995.99**	**13,792.97**
Cash Flows From Investing Activities					
Investment in property, plant and equipment	-450.07	-963.49	-1,866.18	-2,339.76	-2,768.82
Acquisitions Net	-12	0	-1,945.87	-821.55	-13,461.01
Purchases of investments	-781.93	-2,903.20	-11,461.68	-33,201.18	-84,713.30
Sales/Maturities of investments	707.93	2,661.79	1,497.02	22,829.41	78,509.86
Purchases of intangibles	0	-12.63	-476.28	-226.62	-912.17
Other investing activities	0	0	2.46	9.6	22.62
Net cash used for investing activities	**-536.07**	**-1,217.52**	**-14,250.53**	**-13,750.10**	**-23,322.82**

Cash Flows From Financing Activities					
Common stock issued	54.65	0	0	100.46	1,397.28
Dividends	-	-	-	-	-
Other financing activities	40.44	124.75	2,425.81	9,418.43	6,144.28
Net cash provided by (used for) financing activities	**95.09**	**124.75**	**2,425.81**	**9,518.89**	**7,541.56**
Net Change in Cash	1,837.72	3,601.60	-3,654.49	7,753.15	-2,188.84
Cash at beginning of period	2,362.17	4,180.38	7,781.98	4,127.48	11,880.63
Cash at end of period	4,199.89	7,781.98	4,127.48	11,880.63	9,691.80
Free cash in flow					
Operating Cash Flow	2,279.44	4,700.48	8,178.82	11,995.99	13,792.97
Capital Expenditure	-450.07	-976.12	-2,342.46	-2,566.38	-3,680.99
Free Cash Flow	1,829.36	3,724.36	5,836.36	9,429.62	10,111.98